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Research report

Extending working life

Behaviour change interventions

By Andrew Weyman, David Wainwright, Rachel O'Hara,
Philip Jones and Alan Buckingham

Department for Work and Pensions

Research Report No 809

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A report of research carried out by the University of Bath, with the University of Sheffield on behalf of the Department for Work and Pensions

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Central Analysis Division, Department for Work and Pensions, Upper Ground Floor, Steel City House,
West Street, Sheffield, S1 2GQ

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The Authors

Dr Andrew Weyman is a Senior Lecturer in the Department of Psychology at the University of Bath, with over 25 years' experience in applied psychology research. His specialist area is the psychology of risk in decision-making, communication and stakeholder engagement. From 1992–2006 he worked for the Health and Safety Executive in a range of research and policy related roles, latterly as a Principal Social Researcher in the Corporate Science and Analytical Services Division (2003–06) and as Head of the Social and Economic Factors Unit at the Health and Safety Laboratory (2000–03). Prior to this he worked as a consultant with R.J. Feeney Associates.

Dr David Wainwright is a Health Sociologist who studies the connections between work, illness and society. He is a Senior Lecturer in the Department for Health, University of Bath and convenes the Work, Health and Wellbeing Research Group at the University. His research interests include stress in the workplace, sickness absence and return to work.

Dr Rachel O'Hara is a Chartered Occupational Psychologist with research experience in occupational and health psychology; risk management and communication; and evaluating public service interventions. She is currently employed as a lecturer in Public Health at the University of Sheffield. From 1999–2006 she worked as a research psychologist and Head of the Social and Organisational Factors Section at the Health and Safety Laboratory, Buxton.

Professor Philip Jones, Department of Economics, University of Bath, has published extensively on public finance and public choice in leading economics and political science journals, e.g. the *American Economic Review*, *Economic Journal*, *Journal of Public Economics*, and *British Journal of Political Science and Political Studies*. More recently, he has published papers on the way that behavioural economics informs public policy, e.g. in the *Journal of Economic Psychology*, the *Journal of Socio-Economics* and the *Journal of Social Policy*. He is co-author (with John Cullis) of *Public Finance and Public Choice*, 3rd edition (Oxford: Oxford University Press, 2009) and *Microeconomics: A Journey Through Life's Decisions* (London: Prentice Hall, 2009).

Dr Alan Buckingham is a Sociologist who works in the Department for Health at the University of Bath and is a member of the Work, Health and Wellbeing Research Group. He has expertise in the statistical analysis of large data sets and has research interests in organisational influences on work-related resilience and sickness absence.

Glossary of terms

Active communication	For example, TV/radio is distinct from passive communication, e.g. a website, where information is simply made available to those motivated to seek it out.
Amplification-station	A communication transmission node/that can be used to enhance the distribution of communication material – see Kaspersen, 1989.
Automatic enrolment	A situation where the default arrangement is to co-opt individuals into a scheme, e.g. an employer pension.
Behavioural life cycle model	Individuals are aware that there are times when they must save to smooth their consumption stream, but they behave as if they have a preference for immediate gratification.
Choice architecture	The options available to people and the way they can be configured to impact on the decisions people make (see Thaler and Sunstein, 2008).
Cognitive	The mental process of knowing, including aspects such as awareness, perception, reasoning, and judgement.
Cognitive dissonance	Individuals' discomfort when they hold conflicting beliefs, and when their motivation is to change beliefs to achieve consistency.
Cognitive filter	The impact of underpinning orientations on how new information is perceived and reacted to (see Cognitive).
Discounting	Discounting individuals regard money received in the future as worth less than money received immediately (an individual with £100 at present is able to invest this sum to achieve £100(1+r) in one year, where r is the rate of interest).
Disposition bias	Individuals' willingness to hold on to poorly performing stocks and shares to avoid suffering a loss, when they are far more willing to sell stocks and shares that are rising in value to realise a gain.
Endowment effect	When individuals acquire a good (e.g. either through purchase or as a gift) they value it more highly (the amount they require for the good is much greater than the amount they are willing to pay for the good).
Framing effects	Relates to how options/choices are perceived, e.g. as gains or losses; in many instances people are loss averse (see Heuristics).
Fungible	Interchangeable or moveable in the sense of substitution.

Herding	Herding individuals are strongly influenced by the behaviour of others.
Heuristics	Rules of thumb; mental shortcuts that amount to intuitive sense-making; the tendency to focus on a sub-set of what are believed to be key characteristics of an issue. Contrasts with detailed deliberative contemplation (see Rational actor).
Homo economicus	Rational economic man.
Hyperbolic discounting	Hyperbolic discounting individuals discount future costs and benefits at a much higher rate in the short run than in the long run.
Intervention	Any configurable attempt to influence or otherwise change the status quo, in public policy relates to attempts at engineering (routinely social/behavioural) change.
Intrinsic motivation	The degree of fulfilment derived from the content of work, as discrete from financial reward (see Maslow, 1943).
Libertarian paternalism	Government intervention to paternally influence choice leaving individuals free to make their own choice.
Life cycle model	A model in which individuals smooth consumption over different periods of their lives (rather than spending excessively in one period and saving excessively in the next).
Loss aversion	Loss aversion individuals are far more willing to take action to avoid a loss than to acquire a gain (an important element in Daniel Kahneman and Amos Tversky's prospect theory).
Market failure price distortions	Market failure price distortions make market provision inefficient.
Mental accounting individuals	Mental accounting individuals divide their income into different mental accounts and spend differently from different mental accounts.
Mental models	Models people's internal representation of elements in their world, often impressionistic and potentially incomplete (see Heuristics).
Mental models approach to communication	Developed at Carnegie Mellon University by Baruch Fischhoff and Granger Morgan and colleagues
Nudges	Contextual influences that induce people to act in ways that feel natural to them (see Thaler and Sunstein, 2008).
Organisational climate	Structural and institutional parameters; systems, practices and priorities that provide a defining influence on employee culture and behaviour.

Rational actor	Homo-economicus – the premise that people make decisions that maximise value, gain or benefit (classically financial).
Self-efficacy	Self-efficacy is our belief in our ability to succeed in a given situation.
Status quo bias	Individuals persist in following a course of action even when it is no longer in their best interest.

List of abbreviations

BSE	Bovine Spongiform Encephalopathy
DWP	Department for Work and Pensions
EWL	Extending working life
FSA	Food Standards Agency
HSE	Health and Safety Executive
MAFF	Ministry of Agriculture, Fisheries and Food
NAPF	National Association of Pension Funds
NICE	National Institute for Health and Clinical Excellence
ONS	Office for National statistics
SEC	Socio-economic Classification
SIC	Standard Industrial Classification
SOC	Standard occupational Classification
SPA	State Pension age
UK	United Kingdom

Summary

Background and scope

While a positive feature of the post-war period, increasing longevity brings new challenges, not least with respect to provision for old age. In particular, it impacts on the ratio of working to non-working life. Beyond public policy concerns over the long-term fiscal sustainability of current retirement norms (State Pension age (SPA) and earlier), recent years have witnessed interest from some employers, conscious of skills shortages and attracted to flexible working arrangements, as well as calls from the older age organised interest groups for enhanced access to paid employment in later life.

Despite recently announced incremental rises in the minimum age at which State Pension is claimable, it is apparent that a significant proportion of the working population continue to leave the labour market before their SPA, either through choice, diminished health status or as a consequence of employer policies. Moreover, working beyond SPA represents a minority activity.

The economic and social implications surrounding the continuance of exiting custom and practice has resulted in the UK Government prioritising ways of encouraging individuals to remain in paid employment for longer.

The Department for Work and Pensions (DWP) has strategy responsibility for all aspects of older worker employment. A core element of its remit relates to finding ways to stimulate higher rates of employment amongst individuals aged 50 and over.

Key policy objectives in this area include:

- influencing employer orientations, policies and practices pertaining to the employment of older workers;
- enhancing opportunities for older individuals to return to paid employment;
- encouraging employees to remain in paid employment for longer;
- encouraging employees to make enhanced financial provision for retirement.

The DWP has funded extensive research on the attitudes, knowledge and information preferences of older workers, as well as their broader orientations to extending working life (see Appendix B).

Informed by insights from cognitive psychology, behavioural economics, social psychology and socio-cultural on motivating behaviour change we were asked to:

- interpret and distil the amassed UK and international findings (over the period 2000–10); and
- make recommendations regarding policy intervention options that will stimulate higher rates of employment amongst older people and enhance levels of retirement income following withdrawal from the labour.

In particular, the DWP wished to enhance its insight into the array and relative importance of individual, social and cultural variables that influence retirement orientations and decision-making, referenced to contemporary insights on motivating behaviour change, in order to enhance its delivery of an evidence-based approach in the design of policies that encourage extending working life (EWL).

Objectives

- Review and distil established research evidence on variables impacting on people's orientations to work in later life and retirement planning behaviour.
- Interpret the above with reference to the social science evidence base on motivating behavioural change.
- Produce theoretically informed recommendations for public policy intervention strategy on EWL and retirement planning.

Main findings

Public orientations to extended working life

There are significant challenges to finding ways to encourage people to extend their working lives (EWL) and make effective financial provision for retirement. There are strong social norms amongst both employers and employees surrounding retirement at and before SPA.

There is evidence that a significant proportion of individuals are disposed to extend their working lives, but many desire a change in working hours, and place a high value on choice and flexibility over hours worked.

People are more disposed to reacting to options they are presented with, e.g. by employers or by Government, in terms of pensions choices over their date/manner of retirement, i.e. most are passive rather than active decision-makers.

Most people are not active planners or information seekers with regard to EWL options, pension investment choices or retirement planning. They are more disposed to react to events, options and opportunities when they are tabled by others. This suggests that situational influences play an important role in decision-making. People are susceptible to an array of contextual influences (nudges¹), some of which may motivate early withdrawal from work, while others may encourage working longer. This would suggest that public policy interventions that lead to changes in the choice architecture² are of key relevance in the EWL and pension investment domains. Government is not the only choice architect. Employers play a key role in defining employee EWL, pension and retirement decision architecture.

Theories of behaviour change

Psychology behaviour change models that are widely used in public health and some other policy delivery contexts are of limited use in the EWL and pension investment domains, principally because they rest on the following assumptions:

- individuals are actively engaged with making rational decisions over these issues (**it seems that most are not**);
- change is vested within the gift of individuals (**notable externally imposed 'push' and 'pull' influences also play a role**);

¹ Contextual influences that induce people in ways that feel natural to them (see Thaler and Sunstein, 2008).

² The options available to people and the way they can be configured to impact on the decisions people make (see Thaler and Sunstein, 2008).

- the primary point of resistance to EWL rests with individuals (**potentially underplays structural, institutional and cultural effects**);
- cultural change arises from the sum of individual actions (**underplays structural and institutional normative influences, e.g. workplace climate**³).

The nudge (decision architecture) concept is quite distinct from established (health) psychology behaviour change approaches⁴. Rather than aiming to help individuals to become more rational in their decision-making, the nudge perspective focuses on ways of configuring options to take account of human irrationality, i.e. essentially, it advocates policy intervention that makes changes to the context in which individuals make decisions, rather than attempting to change how individuals feel about/react to contexts, e.g. automatic-enrolment⁵ in pensions, rather than (routinely via communication media) stressing the pitfalls of failing to invest in a pension.

Communicating with the public

Turning to public knowledge and understanding of EWL, it is apparent that there are widespread misunderstandings over even basic elements such as SPA. People also find the complexity of the tax and pension systems daunting, to the extent that few actively attempt to calculate the impact of alternative options on income in older age.

It is unlikely that education initiatives aimed at enhancing financial literacy would significantly redress this. An approach which is more likely to be effective rests with building on people's, generally partial and impressionistic mental models⁶, e.g. *'you need to save for retirement'*, *'pensions are a good idea'*, *'it's not worth working [post SPA] as I will lose it all [additional income] in tax'*, etc., reinforcing those that are substantively accurate and addressing gaps and misconceptions. We therefore recommend the mental models⁷ approach⁸ to communication as a tried and tested audience-focused framework for developing message content that meets the informational needs of target groups – for both EWL and pensions issues. There are synergies between the mental models and nudge approaches in so far as both aim to capitalise on extant public understanding and decision behaviour rather than attempting to educate people in the hope of making them more rational.

Effective communication in this area requires a broader perspective than incorporating insights on enhancing comprehension and techniques for filling gaps in public knowledge. Rises in SPA,

³ Organisational climate – structural and institutional parameters; systems, practices and priorities that provide a defining influence on employee culture, and behaviour.

⁴ An array of theoretical (health) psychology models of behaviour that draw on rational actor assumptions (see footnote 5) that view change as the product of recognition of personal vulnerability and belief in the capacity to change.

⁵ Where the default arrangement is to co-opt individuals into a scheme, e.g. an employer pension.

⁶ Heuristics – rules of thumb; mental shortcuts that amount to intuitive sense-making; the tendency to focus on a sub-set of what are believed to be key characteristics of an issue. Contrasts with detailed deliberative contemplation.

⁷ People's internal representation of elements in their world, often impressionistic and substantially incomplete (also see footnote 6).

⁸ The mental models approach to communication – developed at Carnegie Mellon University by Baruch Fischhoff and Granger Morgan and colleagues (for a summary see Weyman A.K. and Kelly C.J., 1999; Weyman and Williamson, 2006).

employer and public pensions failures, combined with the spectre of broader failures in the banking and investment sectors have significantly eroded public trust in the motives of certain stakeholders, notably Government and its departments and agencies responsible for delivering this agenda. The impact of even the best technically crafted message is at risk of being significantly blunted if it is perceived as emanating from a source that is not trusted.

Most DWP communication activity with the public on EWL and State Pension issues is indirect, via surrogates. In view of the above, we would recommend that this continues. However, it is important for the DWP to take account of the public trust profile of these surrogates. Importantly, the trust profile of surrogates interacts with the issue under consideration, e.g. one source may be more trusted for advice over EWL; another for pension investment options; and another for pension value estimates, and so on. Critically, it is apparent that any surrogate with a close (actual or perceived) linkage to Government interests is likely to have a low trust profile on the EWL issue.

Choice architecture

It is important that the policy intervention portfolio in this area extends beyond media-based communication output to impacting on structural and normative influences, in particular the choices employers offer employees over EWL and pension investment/draw-down.

We are aware that the DWP has undertaken work with stakeholders aimed at impacting on employer practices since the late 1990s. This has the potential to offer a firm foundation for further intervention to impact on the EWL and pensions decision architectures. The Government's automatic-enrolment pension initiative (scheduled to commence October 2012) offers a promising example of the potential for behaviour change via the employer decision-architecture route.

Implications for public policy intervention strategy

A comprehensive intervention strategy on EWL and pensions should necessarily embody elements that address knowledge gaps, individual motivation and the decision architecture, the latter relating to the broader agenda of employer policies and practices towards older workers.

We would conclude that higher rates of impact on individuals' choices are likely to accrue from a primary public policy intervention focus on addressing elements that impact on the decision architecture; notably the key role played by employers in configuring the options available to employees and underpinning human resource practices that have the potential to change cultural norms in the workplace, e.g. working beyond SPA, remaining enrolled in the State sponsored automatic-enrolment and, where available, auto-enrolling in the employer's pension scheme, becomes part of the natural order of things.

The scope for partnership-working interventions with employers is twofold:

- for employers to act as a conduit/amplification station⁹ for transmitting EWL and pension investment messages to employees, i.e. via DWP initiated interventions that impact on employers to elicit their co-operation to communicate key messages/information to employees;
- in medium and large organisations, to propagate the adoption of good EWL practice in human resource management¹⁰, via DWP initiated interventions that motivate its adoption.

⁹ A transmission node that can be used to increase the consumption of communication material (see Kasperson, 1989).

¹⁰ This activity could usefully build on established DWP activity with employers on managing diversity in the workplace.

While a voluntary code of practice on Age and Diversity in Employment (1999) was established, this does not seem to embody an operationalisable definition or vision of the types of human resource practices that should be propagated to encourage employee EWL (or those that discourage it). Defining this would seem to be a prerequisite, to configuring future EWL policy intervention activity aimed at employers.

There is a need to plug the notable gap in the evidence base regarding barriers to change in employer practices and the array of existing employer configured nudges that motivate early withdrawal from the labour market.

There is strong evidence of social differences in terms of employment opportunities, the availability of flexible working arrangements, people's capacity to work and the degree of cultural engagement with work in later life. A key implication of this is that a segmented approach to intervention is likely to yield higher returns than an undifferentiated (whole population) approach.

An arising implication for intervention relates to the need to map and profile the demographics and pathways to influence for the primary employment sectors and develop bespoke intervention packages that meet the needs of each¹¹. For example, the fluidity of employment arrangements in the construction sector significantly limits the scope for influence via the employer. By contrast, the employer route is likely to offer the more fruitful avenue for influence within the public sector.

Relative to other social groups, there are grounds for concluding that rates of behaviour change are likely to be highest from targeting individuals who are more intrinsically¹² engaged with work; who work in sectors where flexible employment is available and whose preference is to continue working for their current employer. There are concentrations of these individuals, who we have characterised as '*the receptive middle*' within certain occupations/employment sectors, and there may be a case for apportioning intervention resources to take account of this, i.e. the underpinning logic is that policy interventions aimed at impacting on this strata, via employers in sectors in which they are concentrated, will potentially realise higher rates of behaviour change than interventions aimed at segments that do not possess these features. Establishing change within these groups also embodies the potential to produce a ripple effect that impacts on the retirement norms of other social groups.

Turning to elements of the decision architecture that lie beyond the employer, intuitively, there is scope to configure tax, benefit and other fiscal arrangements in ways that motivate behaviour change¹³. However, again we would recommend that any proposed change in incentives or disincentives should be tested on the public(s) to see how they impact on their mental models and arising decisions. As Thaler and Sunstein¹⁴ highlight, it would be unwise to make assumptions over the extent to which such nudges might inspire rational choices. On the basis of the available evidence, we would suggest that nudges of this type would need to be highly intuitive and simply configured headlines such as '*a tax holiday for working for two more years*', or '*a lump sum after three extra years*', or '*emphasising the loss of income from early retirement*' rather than being buried in the detail of fiscal arrangements.

¹¹ Bespoke packages for different segments should not be interpreted as promoting discrimination, rather it is to counter discrimination due to structural and cultural differences.

¹² Intrinsic motivation – degree of fulfilment derived from the content of work, as discrete from financial reward (see Maslow, 1943).

¹³ For an articulation of the scope for fiscal intervention see *Winning the Generation Game* (Cabinet Office, 2000).

¹⁴ Thaler, R.H. and Sunstein, C.R. (2008). *Nudge: Improving decisions about health, wealth and happiness*. Yale University Press.

Conclusions

- Individual, cultural and structural influences impact on the likelihood of working in later life. Some of these variables are more amenable to public policy influence than others. Their relative importance is also prone to vary between different population segments. Policy intervention strategy needs to take account of this.
- Policy intervention to address situational influences on behaviour regarding retirement, disposition to EWL and pensions investment/draw-down would appear to offer a the potential for higher rates of behaviour change than approaches aimed at changing people's attitudes.
- A bespoke approach to intervention is needed that takes account of different employment arrangements, practices and personnel profiles in different employment sectors. There is a need for research to map and characterise the sectors to support this. The mapping might usefully include a characterisation of employer perspectives on barriers to change and how these are prone to vary by employment sector.
- For medium and large enterprises – the DWP should build on its established stakeholder engagement activity with employers and other stakeholders to develop and define a model of good human resource practice that establishes a positive decision architecture that permissions and motivates employees to extend their working lives.
- Consideration should be given to engaging a small sample of organisations (large, medium and small) to serve as case-study examples of good practice for motivating extended working life. Provision of support to participating organisations (plausibly via an action research approach) could be used to derive insight on configuring materials and tools that would support employers, for wider roll-out.
- The adoption of a mental models approach is recommended to enhance the content of communication material and aspects relating to its transmission, e.g. the trust profile of surrogates. There would be benefit from further research on public(s) mental models of EWL.
- There is a gap in the evidence base regarding employee beliefs, interpretations of employer practices on EWL and impacts on work/retirement behaviours. People's beliefs (accurate and inaccurate) have important behavioural impacts. There is a gap in the evidence base on what constitutes a nudge towards/away from EWL. Findings might usefully be combined with findings on employer perspectives on barriers to change.

1 Introduction

1.1 Scope

This report discusses options for developing public policy interventions to promote extending working life (EWL) up to and beyond State Pension age (SPA). It aims to combine social science insights on behaviour and cultural change with the evidence arising from our review of the research evidence relating to public attitudes towards the extension of working life and retirement planning (see Appendix B).

The intervention theories, tools and techniques that are considered have been drawn from a range of social science paradigms, perspectives and application contexts. A pragmatic, practical realist, perspective has been adopted in considering their applicability to the EWL agenda, to a lesser degree, related retirement planning/pension investment issues. This report aims to provide a pragmatic approach which is theoretically informed, rather than being constrained by a particular paradigm, model or theoretical perspective.

A limitation of many behaviour change reviews is that their focus has tended to be limited to theoretical elements surrounding the **theory of change**, to the extent that they underplay key elements relating to the **intervention logic**, i.e. the process of policy delivery or ‘making it happen’. This imbalance is also a characteristic of the wider social science literature on behaviour change.

We have attempted to address this by focusing on empirical evidence on the cultural profile of EWL/pensions¹⁵; the characteristics of target groups and pathways to influence.

The consideration of intervention options extends beyond the development of communication media to addressing deeper cultural and structural influences.

The objective of devising public policy interventions that motivate people to behave differently intuitively implies the need to focus on individuals. However, it is also important to consider the contextual drivers of behaviour, in particular cultural norms and structural influences. Different social science perspectives place different degrees of emphasis on the extent to which behaviour change is best achieved through a focus on the individuals or the context in which they operate.

This debate is central to the public policy intervention context on EWL, retirement planning and pension investment, and more widely. It is essential to keep in mind that decisions over the relative focus on individuals or context varies between different public policy agendas, e.g. for addressing public health priorities such as inoculation or obesity, the scope for influencing situational variables tend to be modest. By contrast, there is significantly greater scope in the world of work and employment.

1.2 Theory of change – individuals versus situations

A key finding of our review of (see Appendix B) was that most people are relatively disengaged from active consideration of options regarding extending their working life or personal pension investment. People are more disposed to react to options tabled before them, rather than actively seeking them out.

This suggests that the impact of policy interventions, such as the production of communication material, particularly that which requires people to be motivated to search it out on websites or request literature, is likely to be modest.

¹⁵ Employer, personal and State pensions.

It highlights the need to devise public policy interventions that impact on the employment and pension investment options that people are presented with, i.e. the evidence highlights a primary need for policy-makers to find ways to influence situational variables; most pertinently, as a means of impacting on those people who are currently in paid employment.

Before progressing to the consideration of intervention options and evidence of what works it is necessary to consider some of the fundamental differences in approaches to influencing public behaviour.

All public policy behaviour change agendas embody the need to consider the relative impact of cognitive¹⁶ and situational¹⁷ influences on behaviour, the scope for influencing both, the relative emphasis on each and how this varies with different population segments. It is also important to keep in mind that there is notable consensus that public policy interventions¹⁸ that address attitudinal and knowledge elements alone, e.g. health-labelling of foods in supermarkets, or road safety advice routinely realise modest impacts (see National Institute for Health and Clinical Excellence (NICE), 2007).

Any public policy portfolio of interventions on EWL, employer and personal pension investment/retirement planning will necessarily involve a package of complementary activity, aimed at influencing individuals directly, e.g. via communication media aimed at enhancing knowledge/ changing attitudes and influencing the context in which individuals operate, employer practices, fiscal arrangements and other situational drivers of behaviour. Critically, the balance of activity needs to vary to maximise impacts on different segments of the population (see Section B.3).

Policy decisions over the type of intervention(s) selected must consider the interplay between:

- options relating to the theory of change (how change is hypothesised to occur);
- the intervention logic (how the pathways to influence will work) referenced to the issue (in the current context EWL or pension investment); and
- the characteristics of the target group(s) (see Chapter 2 and Table 2.1).

The need to consider this interaction is key, and its importance cannot be over-emphasised, e.g. for individuals who are not in paid employment configurable interventions may be limited to the provision of informational material. For those in stable employment, there may be scope to supplement this through working with employers to shift cultural norms. For example, it is noted that the Department for Work and Pensions (DWP) has already undertaken a substantial body of activity aimed at working with and influencing employers, including sector-based work, in areas related to the EWL agenda, e.g. aspects of the 'Age positive' initiative (2006)¹⁹.

These elements are discussed in more detail in Chapter 6.

¹⁶ The mental process of knowing, including aspects such as awareness, perception, reasoning and judgment.

¹⁷ Structural, e.g. design of work or pension choices, and cultural – established ways of viewing the world and behaving that meet with peer approval.

¹⁸ Any configurable attempt to influence or otherwise change the status quo. Examples within the EWL domain might include producing information to help people make better pension investment choices, or recruiting employers to sign-up to adopt human resource practices that encourage EWL.

¹⁹ As part of the Age Positive campaign the DWP has sought to work with nine leading sector bodies aimed at stimulating change in employer culture and practices relating to the removal of the default retirement age and increasing retention rates of older employees. Activities include: articles in trade publications, workshops and case study examples.

2 Identifying and defining target groups

Segmenting the target population is based on identifying sub-groups with shared characteristics to enable the development of bespoke engagement strategies with greater impact.

2.1 Segmented versus non-segmented approaches

There are coherent arguments for both segmented (sub-population) and non-segmented (whole population) approaches to public policy delivery.

Proponents of a whole population approach (e.g. Rose, 1985) hold that even if only a small proportion of people are influenced, this can equate to a relatively large net gain, e.g. 2% of 70 million people is 1.4 million individuals. The counter-argument is that an undifferentiated approach offers partial, generalised, solutions, rather than solutions that are well focused on meeting the needs of priority²⁰ sub-groups. In particular, they highlight the potential for wastage due to directing resources at non-relevant individuals and groups (see, for example, Adams and White, 2005; Rockhill, 2004, 2006).

A non-segmented approach also tends to restrict the scope for intervention, typically limiting this to a default orientation around education and awareness-raising, e.g. television and other media advertising campaigns, rather than more innovative organic approaches. The high financial cost of TV/radio communication²¹ also tends to restrict the frequency of transmission.

2.2 Segmentation and intervention logic

Segmentation analysis aims to assess and characterise public understandings and disposition to extending working life (EWL) and personal pension investment, with a view to identifying any significant differences between sub-populations. However, when doing this it is necessary to keep in mind the scope for a segmented approach to intervention. If there is a dislocation between the approach to segmenting population characteristics and the scope for a segmented approach to intervention then the segmentation analysis is of little value (see Table 2.1).

An effective segmented approach relies upon deriving a clear understanding of the causes of the behaviours of interest, mapping points of commonality and, in particular, variability between identifiable and characterisable sub-populations. The more complete this knowledge base is, the greater the scope for an informed and strategic approach to intervention. Advantages over an undifferentiated, **one size fits all**, approach surround the potential for higher rates impact on behaviour for a given resource allocation, and a broader array of intervention options, i.e. beyond knowledge and awareness-raising communication material aimed at individuals.

²⁰ A priority group might be defined in terms of it being a high risk group(s); a highly resistant group(s) or a group(s) that is most receptive to engage. Choices are informed by political expediency and scientific consideration surrounding the theory of change and intervention logic.

²¹ Active communication is distinct from passive communication, e.g. a website, where information is simply made available to those motivated to seek it out.

Segmentation analysis can be useful, not only to typify different social groups but also to enhance the focus on pathways to influencing priority sub-populations, e.g. high risk/vulnerable groups²², or more receptive groups. The capacity to identify employment sectors, geographical regions or locales where concentrations of these sub-populations exist offers further potential to concentrate resources to maximal effect.

However, when making decisions over relative resource allocations, it needs to be kept in mind that 'high risk' groups may share the characteristic of being 'high-resistance' groups, that may yield lower per-capita influence rates than other sub-populations. Relatedly, net gain to the Exchequer, in terms of reductions in the costs of benefit payments, may accrue from concentrating resources on sub-populations that are more receptive to EWL, pension deferral and private pension investment. For example, the review evidence suggests higher rates of impact amongst those who are currently in work, particularly where there is scope for a migration to flexible working hours with the current employer.

This should in no way be interpreted as a call for the abandonment of **high risk/high resistance** groups to their destiny, but offers insight into the size of the impact on different social groups, combined with the recognition that alternative approaches are needed for different sub-populations. The planned (October, 2012) State administered automatic enrolment pension scheme, designed to enhance retirement income amongst those with little or no alternative pension provision, is an example of developing bespoke solutions by social group.

2.2.1 Who are they?

The purpose of segmentation is to examine and characterise social diversity to enable a strategic approach to intervention. Critically, the approach to characterising different population segments needs to take account of the scope for a segmented approach to intervention.

For example, there is limited value in characterisations of the type '*spenders*', '*apportioners*', '*money growers*' (Thomas, *et al.*, 2009), or '*jugglers*', '*survivors*' and '*choosers*' (McNair *et al.*, 2007) '*... attitudinal types that suggested where individuals differed in terms of their money management behaviour ...*' (Thomas *et al.*, 2009, p.2). Put simply, this is because it is not possible to configure policy interventions that can be directed to impact on the identified segments²³ (see Table 2.1). The policy evidence need is for segmented characterisations that can be used to develop pathways to influence.

Of potentially greater utility is evidence that highlights that people's disposition to engage with planning for the future varies, not just in terms of chronological age (the under 25s being least disposed), but also aligns with key life events, e.g. preparedness to engage with planning for the future appears to be greater at the point of marriage; the commencement of (first) home ownership and following the birth of a (probably first) child (Thomas *et al.*, 2009). These insights suggest that targeting individuals at these points in their life cycle may yield higher rates of impact on behaviour than at other times.

A key conclusion, however, is that the amassed segmentation evidence highlights the fact that there is scope for tailoring interventions to appeal to/meet the needs of different sub-populations. We believe that it is possible to add to and refine the typologies identified to date. Necessarily this requires a shift of focus, away from broad demographic and attitudinal descriptions, towards a more focused analysis on the scope for influence.

²² High risk groups, e.g. those with insufficient or no pension provision, or people with disabilities.

²³ At best, typologies of this nature are only of use to inform the content of whole-population-based communication material, through including messages designed to appeal to 'jugglers', 'survivors', etc. This does not really constitute a segmented approach to intervention.

Table 2.1 Segmentation evidence

Q42 Reasons for starting saving [for retirement] (prompted). All actively saving (multiple answers possible)		
Response	%	Our assessment of the scope for policy-led intervention
You are the sort of person that thinks about these things.	66	Effectively zero – in terms of cognitive styles or personality traits. Requires linking to social class/social grade evidence.
Having a bit more spare cash.	54	Effectively zero.
Your employer organised it.	52	Attempt to influence employer practice.
Getting to a certain age.	51	Effectively zero – in the absence of evidence of age cohort differences.
Seeing what retirement was like for others.	42	Effectively zero – in the absence of impacting on employer to change workplace norms.
Advice from family or friends.	37	Effectively zero.
Advice from a financial adviser.	37	Attempt to influence financial adviser practice – via professional associations.
Finishing paying off other debts.	31	Effectively zero.
Buying a house.	30	Consider using mortgage lenders/advisers as surrogates.
Getting a new job.	30	Attempt to influence employer practice at point of recruitment – via established sector-based networks.
Having children.	28	Link to unsolicited mail shot to register of births.
Getting married.	19	Link to unsolicited mail shot to register of marriages.

Source: Thomas *et al.* (2009).

The assimilation of relevant segmentation evidence derived from our review identified an array of variables that motivate early or delayed retirement. Primary variation of these was apparent by employment status (in or seeking work) and social grade.

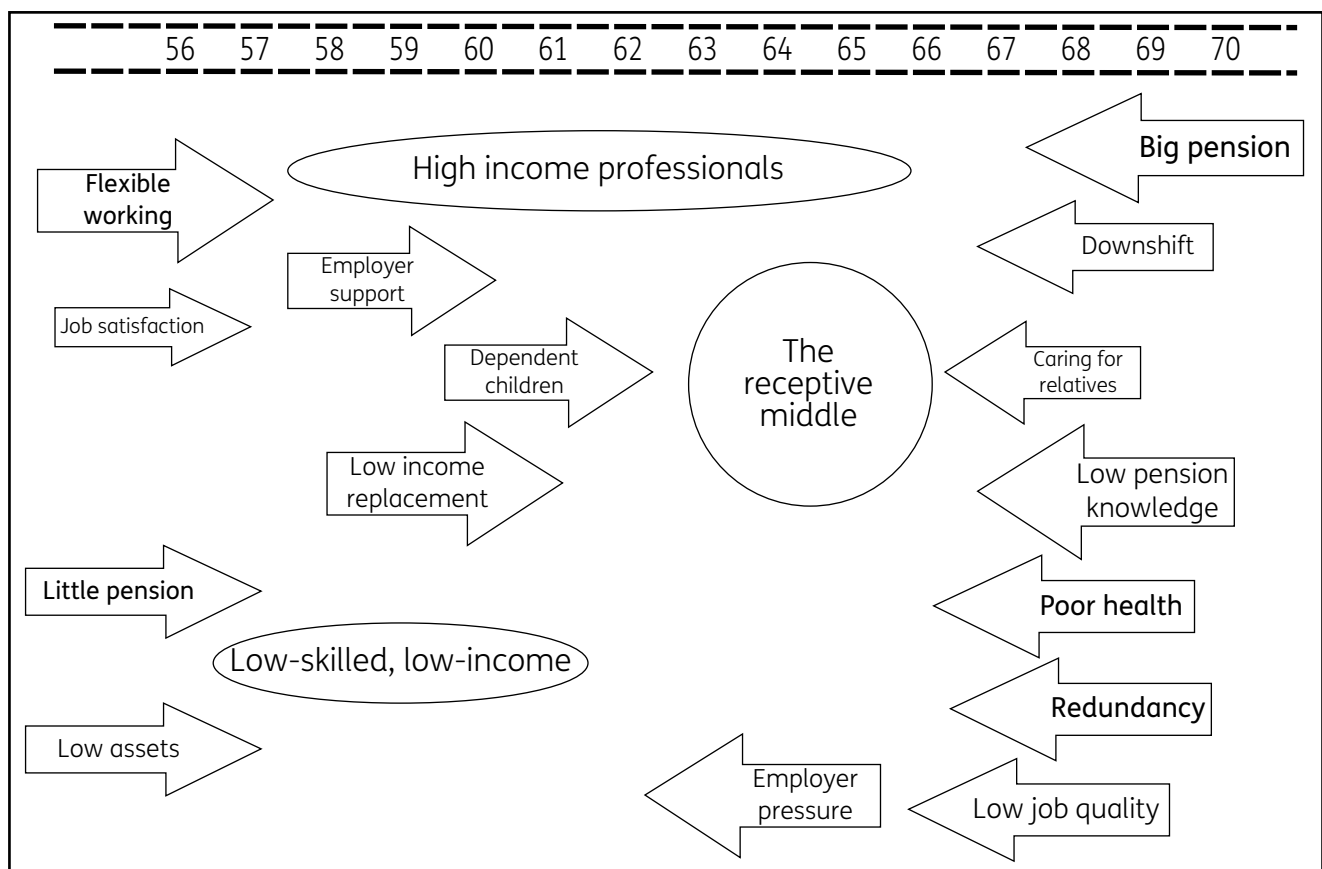
Of those in work three broad groups were identified (see Figure 2.1 and Section B.5). Those in professional/managerial roles are likely to have greater financial independence and choice over when and how to retire. In intervention terms, this group arguably requires least attention. At the other end of the social spectrum are the low/unskilled, with restricted employment options and very modest retirement income arrangements. They also tend to experience lower intrinsic engagement with work and a stronger predisposition to realising an early exit. Limited assets may push them to EWL, but higher rates of debilitating ill-health and higher likelihood of redundancy also make them prone to an early exit. In intervention terms, this group is likely to be the most difficult to influence. Their disposition/ability to engage is not just based on less intrinsic attachment to work and lack of understanding of relevant parameters (although this is likely to be present) but rooted in structural factors that lie beyond personal volition.

A key conclusion of our evidence review was that scope for public policy intervention is greater for the middle strata. Reasons for believing this are that members of this group are more likely to be in stable employment and employment of a type where the flexible working arrangements, that many older workers find attractive, are more likely to be available. They are also more likely to possess occupational and/or private pensions that might be enhanced through deferral or additional contribution. At the most fundamental level there is some evidence that members of this group benefit from more intrinsically engaging work. They also are less likely to suffer from ill-health and to possess marketable skills/qualifications, the latter being particularly important in times of employment austerity. For these reasons policy interventions aimed at this more receptive group can be predicted to yield higher gains than targeting other groups. However, the key reason

for concluding this is not attributable to cultural characteristics, such as the degree of intrinsic engagement with work, but to structural/contextual differences that give them an advantage compared with the low/unskilled, in particular the scope for influence via the employer route (see Section B.7).

Re-entry to the labour market poses challenges to workers of all ages, but is widely held to be particularly challenging for older workers (McNair and Flynn, 2005; Bytheway, 2005). Therefore, a key priority should be to develop interventions aimed at keeping those who are currently in employment working longer. For most, the preference is to continue working for their current employer (Hedges *et al.*, 2009).

Figure 2.1 Segmentation by social status²⁴



2.2.2 Where are they?

Recourse to socio-demographic data on income distribution permits an identification of clusters of the social groups characterised in Figure 2.1 at regional and local levels, offering the potential for targeted intervention, e.g. directly at individuals/households in a given locale via a mailshot, or perhaps via local intermediaries, such as community-based groups or local employers.

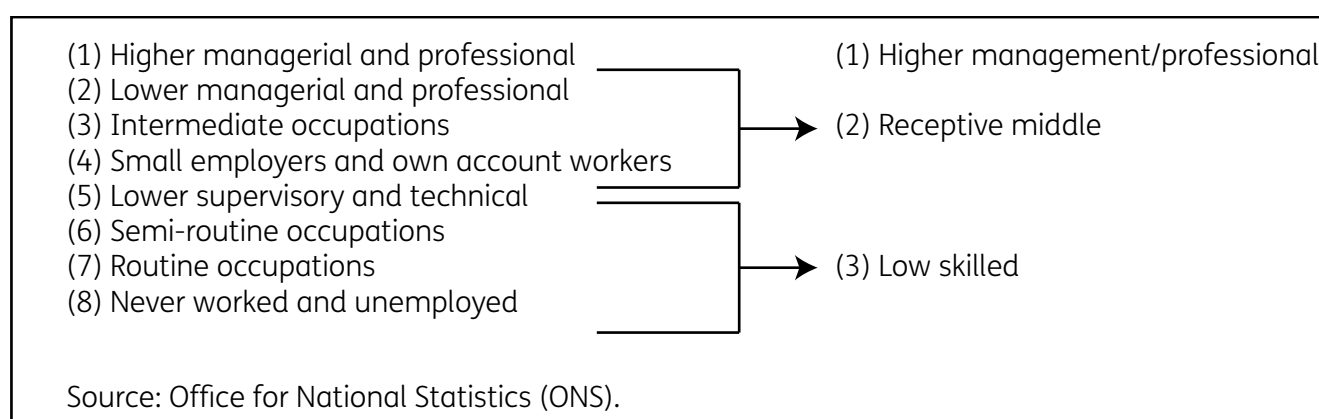
It is also possible to use employment demographic data to map the three primary social grades characterised in Figure 2.1 by employment sector, e.g. the majority of public sector employees are to be found within this middle strata; similarly, lower socio-economic groups are over-represented within the manufacturing sector. A mapping, derived from the integration of Standard Industrial Classification (SIC) and Socio-economic Classification (SEC) data, offers the potential for a strategic

²⁴ Lozenges: distribution of range of retirement in years by social group. Arrows: size and proximity indicates the primacy of their relevance to proximal social groups.

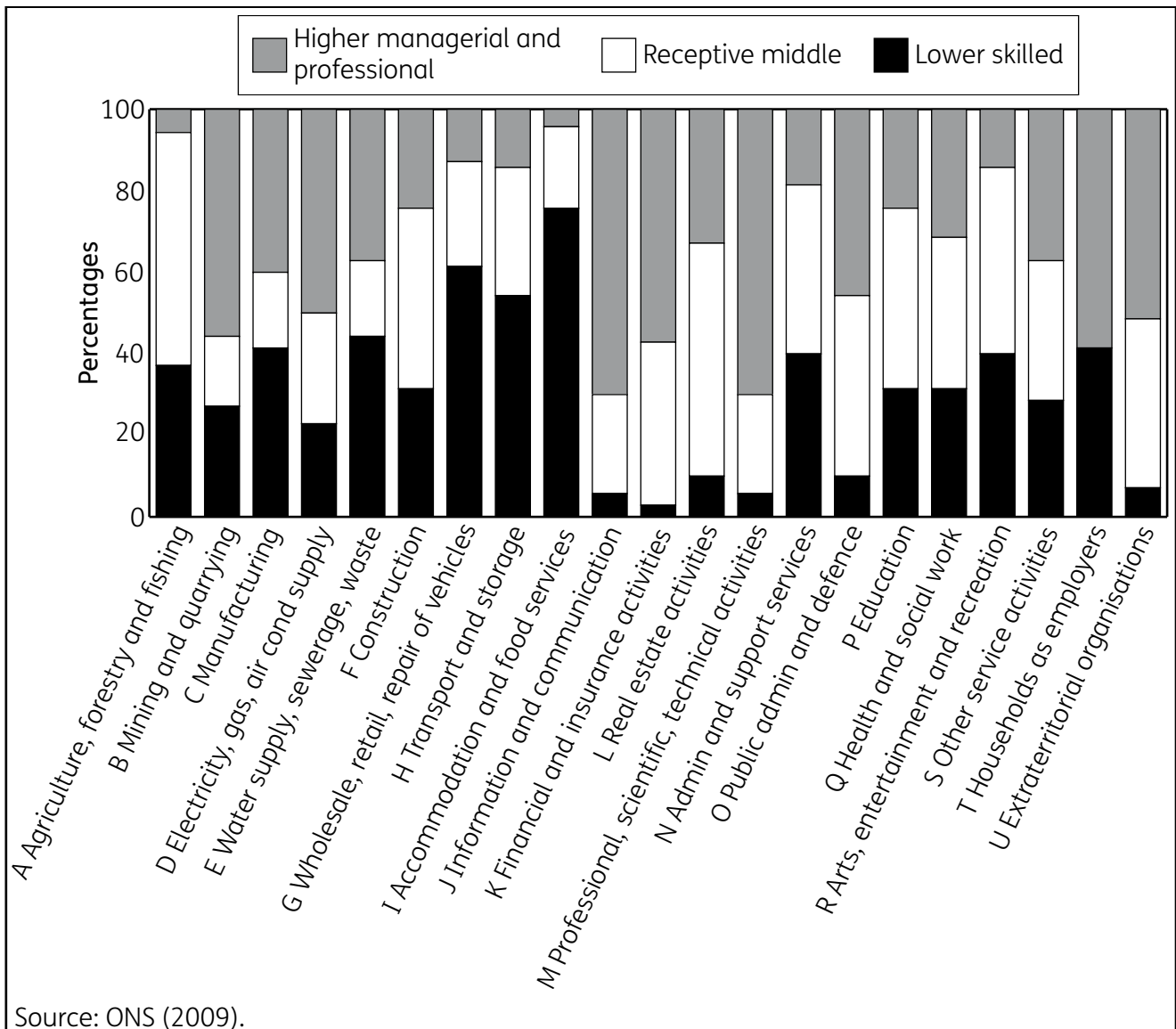
focus for interventions that aim to influence individuals via their employers, i.e. it highlights sectors with the highest concentrations of individuals by social grade, which might be used to develop tailored interventions to capitalise on different needs and emphasis.

Use of Labour Force Survey ((LFS), 2010) data, to map SEC onto SIC, and collapsing the standard SEC schema to three social groups (Figure 2.2) gives a breakdown of 9% professional/senior managerial; 37% semi- and unskilled and 49% in the intermediate strata. Figure 2.3 gives a breakdown of the proportion of the three strata by employment sector. The sector classifications are quite broad, however, the level of insight could be increased by using SIC data to provide a breakdown of the distribution of job types within each sector. As would be predicted public sector employees are concentrated in health/social care, education and public administration.

Figure 2.2 Derivation of three strata from eight SEC schema



It is also necessary to consider the size of each sector, and the distribution of social groups within each. Table 2.2 shows the employment sector where members of the middle social strata are most concentrated. Of the six sectors, three reflect concentrations of private sector enterprises: manufacturing, construction and wholesale, the remaining three reflect a concentration of public sector enterprises.

Figure 2.3 Social class (SEC) distribution by employment sector (SIC)**Table 2.2 Derived social grade by employment sector**

	Manufacturing	Construction	Wholesale retail and vehicle repair	Public admin and defence	Education	Health and Social work
Prof/Senior management	955 (19%)	352 (9.4%)	346 (5.1%)	696 (20.9%)	510 (9.3%)	975 (14.4%)
Receptive middle	1,528 (30.4%)	2,195 (58.7%)	2,332 (34.4%)	2,245 (67.4%)	3,263 (59.2%)	3,586 (52.8%)
Lowest skilled	2,527 (50.3%)	1,190 (31.8%)	4,101 (60.5%)	390 (11.7%)	1,735 (31.5%)	2,229 (32.8%)
Total	3,520	3,737	6,779	3,331	5,508	6,790

Derived from ONS Standard Occupational Classification (SOC) and SIC (2009).

3 Communication interventions

Our review revealed notable gaps and misunderstandings in public knowledge regarding extending working life (EWL), State, employer and private pension issues. Underpinning this is the finding that most people exhibit low motivation to engage in decision-making in this area, i.e. active engagement with planning is a minority activity, rather than the norm, most individuals reacting to the pension and EWL options and situations they are presented with rather than actively seeking them out. The principal implication of this underpinning finding is that the impact of information-based interventions is likely to be modest.

3.1 The boundaries of communication

Most social scientists view information-based communication interventions as a relatively weak intervention strategy for changing behaviour, with higher rates of influence tending to result from addressing more fundamental elements.

Public policy communication objectives routinely embody the ambition to both inform and motivate behaviour change. The former constitutes the more easily realised ambition, but may be insufficient to motivate the latter, particularly if audiences are not receptive to the content, or if the necessary change in behaviour is unattractive or subverted by established norms, e.g. a ‘live for today’ orientation, or precluded, e.g. insufficient income to invest in a personal pension.

Educational material is likely to have greatest impact on the behaviour of the sub-set of individuals who are actively seeking information or at least passively receptive to its content. The review evidence suggests that, for EWL, retirement planning and personal pension information, this equates to a relatively small proportion of individuals. Moreover, if the content of communication material fails to even meet the needs of the receptive middle there is a risk of this ‘on-message’ group becoming alienated and disengaged from the change agenda.

There is significant scope for enhancing public awareness and understanding, however, the evidence review highlighted the need to devise interventions that go beyond education-deficit communication elements, i.e. a key finding was that while knowledge gaps exist, a range of pervasive structural, cultural and dispositional influences impact on people’s behaviour in this area. Additionally, the public is critical and sceptical of the EWL agenda, with a number of key stakeholders, including the Department for Work and Pensions (DWP) being viewed as having a vested interest. EWL and pensions (State, occupational and personal) issues are contentious and can arouse strong feelings amongst many, most notably where outcomes do not meet with what people have been given to expect. A key implication here is that even the best crafted policy communication is likely to be significantly blunted, and may even be counterproductive, if the target audience does not view the source as credible or trustworthy (see Section 3.2.1).

Care should also be taken to avoid becoming beguiled into focusing on honing the content of communication material within the parameters of ‘what we want to tell the public’. A more salient focus is to use empirical insight to inform understandings of ‘what the public need/want to know’ (Section 3.3.1) and identifying effective delivery mechanisms, e.g. ‘who would they trust to provide it’ (Section 3.2.1), i.e. there is a need to configure messages based on empirical evidence that characterises established public understandings (and misunderstandings) and to deliver these messaged via sources that they use and trust (see Section 3.3.1).

3.2 Trust – a primary communication filter

Our review highlighted issues of trust in stakeholders as a core influence on the public(s) orientations to EWL/pensions (State, employer and personal) and, most pertinently from the perspective of government communication activity, it is apparent that there is low trust in the DWP as a source for information on extending working life (Clery *et al.*, 2006; Thomas and Alen, 2008; Vickerstaff *et al.*, 2008; Hedges *et al.*, 2009). In the context of communicating with the public, issues of trust are perhaps best construed as operating as a primary orientating influence, or cognitive filter²⁵. Put succinctly, where a negative trust profile is firmly embedded, at best, information emanating from that source tends to be viewed with scepticism and suspicion, and this is likely to attenuate the disposition to engage with the content. At worst it may lead to complete disregard and produce a ripple effect of amplified resistance to the agenda. This would suggest that the DWP should continue with its strategy of communication via intermediaries on EWL issues, but needs to consider the relative trust profile of these.

3.2.1 Trust in sources of information and advice

A low trust profile potentially negates the impact of even the most rigorously configured and crafted message.

It seems clear that the DWP is widely viewed as partisan (aligned with Ministerial agendas) on the issue of EWL. However, a less negative profile is apparent for elements such as the calculation of pension values; possibly extending to aspects of pension advice (see Thomas and Allen, 2008; Hedges *et al.*, 2009).

At first sight public orientations might appear to embody a logical inconsistency, over low trust in Government and its EWL ambitions, while at the same time holding the view that the **Government should take action** (regulate) over contentious issues, such as employer and personal pension investment failures. We would conclude that these views are compatible, and reflect the, at times, complex interplay of institutional trust profiles with the issue under consideration.

The evidence on trust in g/Government (and other) bodies is that building this, and attempts to enhance profiles, are unlikely to be fruitful, at least in the short- to medium-term.

There are a number of reasons for concluding this:

- most peoples' insight into the activity of government bodies is vague and impressionistic, and this is unlikely to change;
- there are grounds for believing that a positive profile owes much to the absence of **bad news**, rather than a positive track-record, and that a positive track record is quickly lost in the presence of bad/unpopular news;
- there are significant logistical barriers to building a positive corporate trust profile when it is highly unlikely that people will attend to your efforts due to **your** relative invisibility;
- **bad news** tends to assume higher social/media amplitude than **good news** and this makes government bodies vulnerable to unfolding events, routinely defined by variables beyond their control;
- the public's preparedness to trust an organisation tends to interact with the issue under consideration, such that a positive profile in one domain may well have a limited spill-over to other domains/issues.

²⁵ The impact of underpinning orientations on how new information is perceived and reacted to.

For these reasons we would recommend that rather than expending resources on attempting to enhance/build trust on the EWL issue, the DWP should seek to find ways of working with and around its current profile. There are precedents in this area and options, possibly in combination, surround the scope for:

- corporate rebranding;
- the use of surrogates with a more positive profile to propagate messages;
- a change of intervention focus to influence bodies/organisations that impact on public behaviour, e.g. employers or community groups, rather than aiming to influence the public directly.

3.2.2 The scope for rebranding

The evidence on rebranding is limited. However, the establishment of the Food Standards Agency (FSA) in the aftermath of the BSE crisis appears to have resulted in a significantly more positive public trust profile than when a broadly equivalent function was delivered under the auspices of the Ministry of Agriculture, Fisheries and Food (MAFF). We are not aware of any systematic examination of the FSA's trust profile, but the available evidence points to positive inferences drawn on the basis of its title, rather than any detailed insight into its practice (Pidgeon *et al.*, 2003; Weyman and Williamson, 2006).

However, rebranding involves high levels of investment, with no guarantee of success. Neither does it overcome the potential to lose trust when contentious issues emerge.

3.2.3 The use of intermediaries

The use of intermediaries is discussed in some detail in Section B.3. Contrasting with widespread suspicions of DWP's partisan (biased) interests as a source of advice on EWL, the review evidence tells us that the trust profile of employers is more positive than government sources on this issue; and that the idea (at a conceptual level) of independent (likely to be interpreted by the public as unbiased) financial advisers is also widely liked (Thomas and Allen, 2008).

We are informed that the DWP has attempted to address aspects relating to commutation barriers associated with its trust profile by working with intermediaries in its Extending Working Life Sector initiative (2010/11) where there has been work with sector skills councils, trade and professional bodies to act as intermediaries for communication with employers and individuals.

The concept of automatic-enrolment²⁶ pension schemes appears to be widely acceptable and possibly likely to be preferred by a fairly high proportion of the public. On this issue, it seems that many are prepared to implicitly trust others (g/Government and employers) to make the decision for them, and would prefer to be relieved of the burden of choice.

As detailed in Sections B.3 and B.6, we believe that employers represent a key intermediary in propagating EWL and pension-related messages, not just in terms of a repository for educationally orientated communication material aimed at individuals, but in terms of creating a choice architecture²⁷ with defaults that permission and norm EWL. The implication here is that a primary focus for policy intervention should, more profitably in terms of behavioural impacts, be on

²⁶ Automatic enrolment is used here to refer to both the UK State's auto-enrolment scheme, due for phased introduction from 2008, as well as separate employer-based organisational pension schemes.

²⁷ Options and choices that people are presented with, e.g. automatic-enrolment versus individuals opting to join a company pension scheme.

employers rather than individuals per se, at least for policy intervention activity aimed at those currently in employment.

While third sector bodies generally enjoy a positive trust profile, few of them are seen by the public as relevant in this domain.

However, their engagement as delivery stakeholders might offer potential, e.g. they could be enrolled to actively propagate key messages, rather than serving as a passive repository. This might be achieved as part of targeted (based on the envisaged segmentation analysis) locally based initiatives.

While a focus on individuals as the target for behaviour change intervention remains important, it is strongly recommended that this should not constitute the primary focus, as there are sound grounds for believing that impact effect sizes would be modest and the product of intervention activity on behaviour difficult to evidence (see Appendix A).

3.3 Dealing with knowledge gaps and misunderstandings

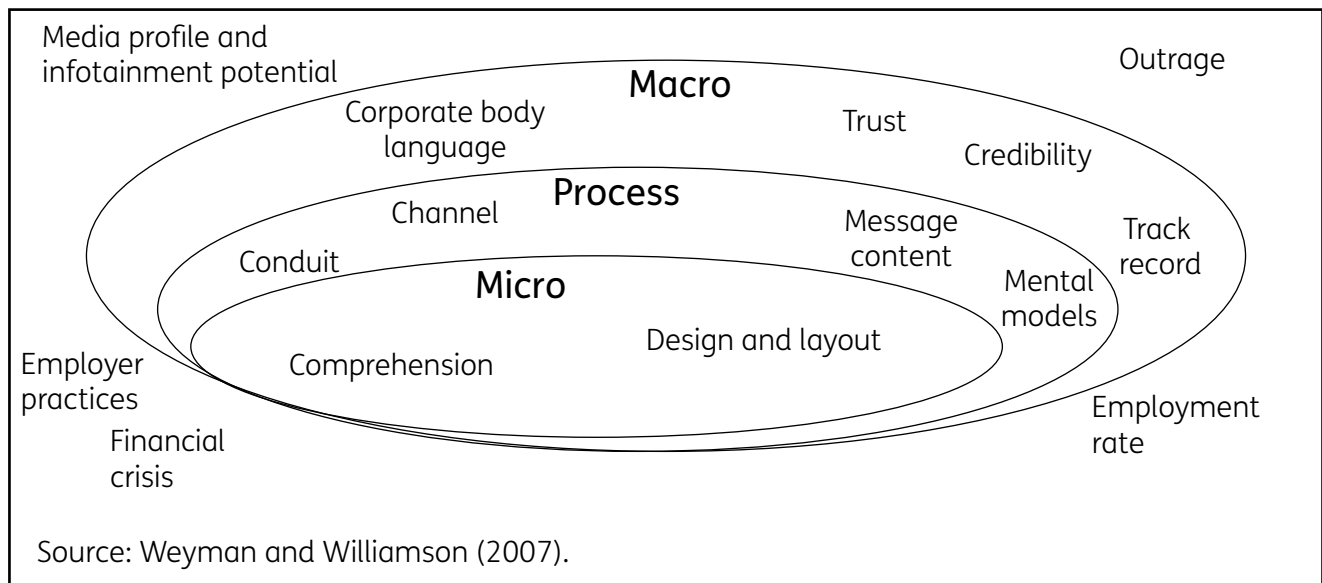
It can be useful to think of communication elements as requiring consideration at three levels. At the most basic (micro) level communication is about presentational format and simplifying complex information to enhance comprehension. Beyond this lie elements relating to ensuring that messages are a good fit with the informational needs of target audiences and identifying effective transmission routes, e.g. media consumption habits. In the case of high profile issues that are politically charged and arouse high public concern, possibly extending to outrage, as is the case with rises in State Pension age (SPA) and private pension under-performance, there is a need to consider macro level elements, relating to the social legitimacy of the issue, trust in stakeholders, etc. (see Figure 3.1).

3.3.1 The mental models approach to communication

The benefits of an audience-centred perspective based upon tailoring communication content to mesh with the extant prior understandings and knowledge gaps (mental models) exhibited by the target population(s) are widely recognised (see, for example, Royal Society, 1992; Weyman and Kelly, 1999; Morgan *et al.*, 2002). There is also recognition of this within the EWL evidence base ‘... *it seems extremely important to acknowledge the way that people feel already.*’ (Hedges *et al.*, DWP 557, p.92).

The concept of a ‘mental model’ is used to characterise the way people think about and make sense of their world. Mental models routinely embody complete and incomplete, accurate and inaccurate, understandings of phenomena and how phenomena interrelate, but serve as the foundation for decision-making. They can embody recourse to heuristics (rules of thumb) and affective (emotional) reactions (see Sections B.3, B.7 and B.9.4).

Where people’s mental models contain ‘bugs’ (misunderstandings), or omit potentially salient variables, this can lead to erroneous conclusions, with unfortunate/unhelpful impacts on understandings and, ultimately, behaviour (see Bostrom *et al.*, 1994; Morgan *et al.*, 2002). In the current context, examples might include: simple inferences, such as: there is little advantage in post SPA working as any income would be ‘... *all whacked in tax*’. Similarly, ‘... *there was an instinctive conclusion that they would lose out – because they would lose [pension] payments they were not claiming ...*’ (Hedges *et al.*, 2009; DWP 557).

Figure 3.1 Concentric model of communication

Described by the Royal Society as ‘A novel and highly promising approach.’ (Pidgeon et al., 1992) the technique represents a notable departure from traditional approaches, in that the process of developing message content begins with commissioning qualitative research to explore and document extant public understandings: in the current instance, EWL and pension/retirement planning arrangements. The purpose of this is to probe and characterise public understandings and sense-making, through a combination of **think aloud**, **freely-associative** interview techniques combined with more structured approaches.

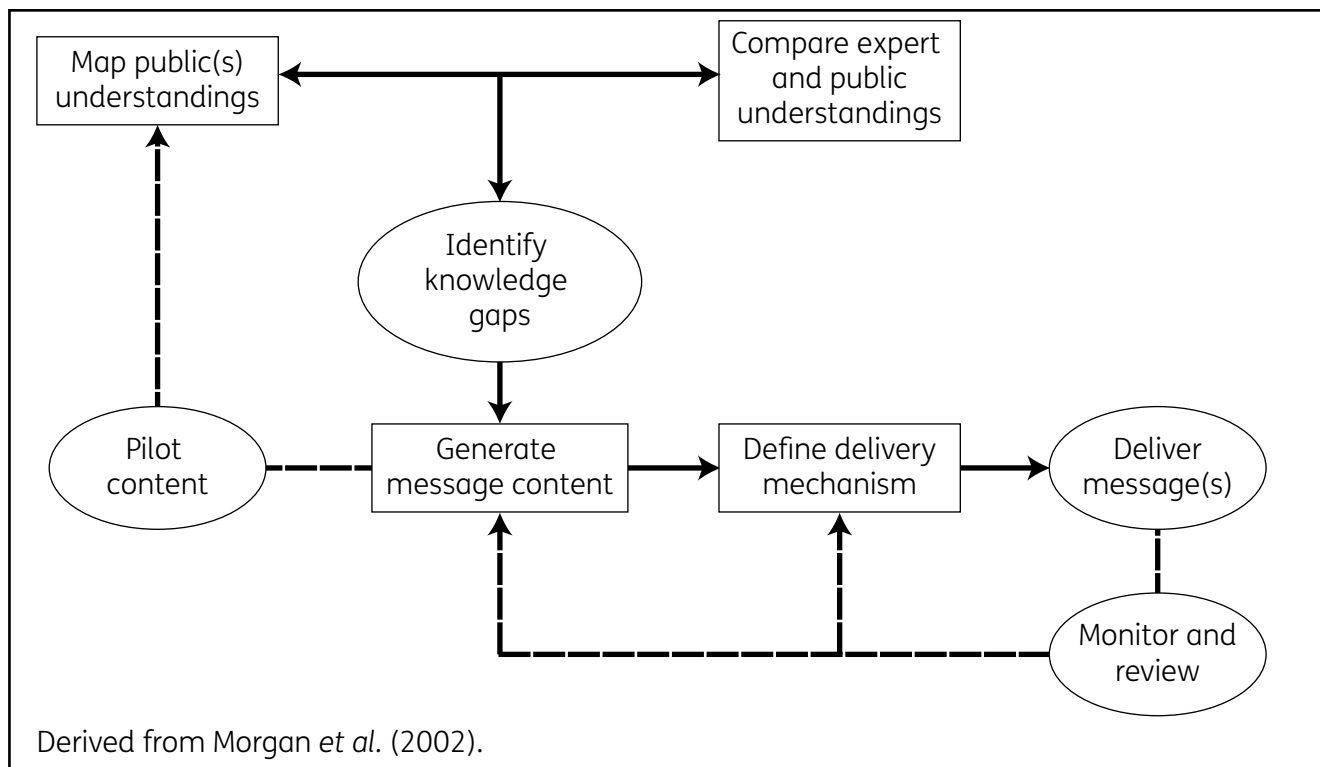
The core elements of the approach can be summarised as follows (also see Figure 3.2):

- **Step 1** – Use established qualitative methods of enquiry ‘... to elicit people’s beliefs [in a way] ... that neither puts new concepts in their minds nor leaves existing ones unstated.’ (Bostrom, et al., 1992).
- **Step 2** – Perform a thematic analysis of the transcript evidence.
- **Step 3** – Generate a lay model of the issue, using influence diagrams and decision-trees that graphically map the salient variables (knowledge and beliefs) and relationships between them.
- **Step 4** – Generate an expert model of the issue – derived from a review of published material, supplemented by interviews with experts – and create an influence diagram that graphically maps the salient variables and relationships between them.
- **Step 5** – Compare and contrast expert and lay models to determine points of congruence and deviation.
- **Step 6** – Use insight from Step 5 to inform decisions over the content and emphasis of communication material. The content should reinforce correct understandings, fill knowledge gaps and address misunderstandings/areas of ambiguity.

There is also scope to finesse these basic elements through gathering quantitative data, via social survey evidence, between Steps 3 and 4, to test the strength of identified associations within a representative sample. The product (communication material), should be trialled/piloted to test its effectiveness in meeting audience needs.

A typical finding from applications of the technique is that ‘Many of the concepts in the expert model²⁸ [are] ... simply absent from the lay model ... Bridging the gap between lay mental models and expert models requires, strengthening correct beliefs and de-emphasising peripheral ones’ (Fischhoff et al., 1997).

Figure 3.2 Summary of the mental models approach



The technique has been quite widely applied in policy-making and delivery contexts, including public health; occupational health and food safety, most extensively in the USA.

In essence, it follows the established education deficit²⁹ communication tradition. But, it offers more than this, in generating a more detailed and systematic insight into public understandings, as well as the facility to summarise and test policy-maker assumptions about the content and distribution of communication material, i.e. it serves as a litmus test of communicators’ mental models of public mental models and drivers of behaviour.

Our evidence review suggests that the mental models of different sub-populations will vary in terms of their completeness and sophistication in respect of EWL and pensions issues. Therefore, careful thought needs to be given to the sample frame when deriving the lay model(s). Our review evidence highlights the salience of: social status; size of employing organisation; employment sector; age and gender (see Figures 2.1, 2.2, 3.1 and 3.2).

²⁸ Experts within the EWL and pensions investment context would foreseeably include senior policy-makers, economists and finance professionals.

²⁹ Education deficit model of communication – assumes that exhibited behaviour is the product of incomplete knowledge and that behaviour change rests with education and awareness-raising. Critics point to the potentially partial and bounded nature of this perspective, in so far as people are prone to exhibit ‘undesirable’ behaviour in the presence of complete knowledge where the change is countered by significant counter-motivations, e.g. structural or cultural barriers to change.

When exploring public mental models it will be necessary to address elements that go beyond technical aspects, such as understandings of pension deferral options, or the availability of part-time work, to include aspects that relate to the broader context, e.g. trust in stakeholders: g/Government, pension providers, employers and financial advisers, etc.; outrage (sense of loss and being ‘short-changed’); blame and accountability (see Section B.8 and Weyman and Williamson, 2007).

Early accounts of the technique (e.g. Bostrom *et al.*, 1992) can give the impression that it is necessarily involved and complex. In part, this is likely to reflect the academic emphasis of the foundation studies. We believe that much can be gained from a more pragmatic, streamlined approach, e.g. through the use of focus groups rather than individual interviews to develop public models (see Weyman and Kelly, 1999; Weyman and Williamson, 2007).

The main strengths of the mental models approach are that it offers:

- a method for linking communication content to the prior understandings of target groups. The advantages of linking new knowledge to old are an established principle in the education and training sphere;
- a litmus test of policy-makers’ beliefs and assumptions regarding the **information needs** of target groups;
- alignment with the principle of a segmented approach to intervention;
- an economical way to characterise the public’s knowledge of technical elements of EWL/pension issues and broader orientations (**cognitive filters**), e.g. outrage, trust;
- influence diagrams, decision trees and other simple graphical representations of findings in a format that is accessible to policy-makers and other non-technical audiences;
- the potential to quantitatively benchmark salient variables; monitor change over time (important from the perspectives of tracking public orientations **and** monitoring progress towards meeting policy delivery targets);
- strong potential for application to communication practice beyond the EWL/pensions domain, extending to other DWP/government department/agency communication agendas.

3.3.2 Mental models of retirement, pensions and EWL – what do we know?

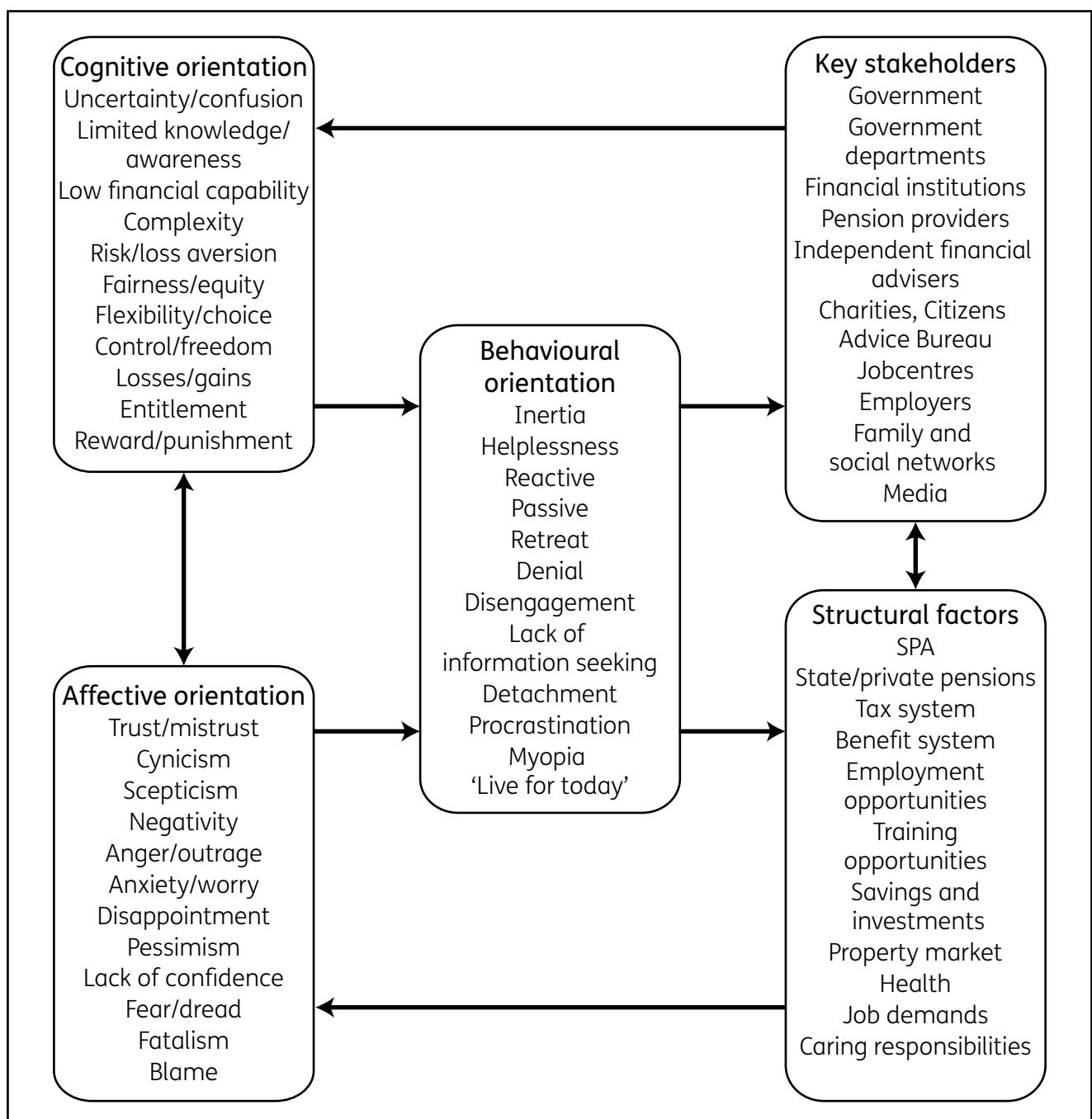
The mental models approach, as detailed by authors such as Morgan *et al.* (2002) advocates characterising public understandings by conducting qualitative interviews with the public. The findings reported on here are not derived from dedicated empirical work aimed at achieving this, rather they are based on secondary summary accounts, i.e. details provided in reports on DWP commissioned research that had a broader remit in terms of characterising public attitudes and understandings of EWL and pensions issues. While we believe that dedicated mental models research of the type advanced by Morgan *et al.* is needed, we have been able to derive an array of relevant insights from our evidence review (see Figures 3.3 to 3.7).

The characterisation of public mental models is considered in terms of: cognitive orientation, emotional orientation, behavioural orientation (intentions), beliefs regarding stakeholder interests and structural factors. These represent a range of intrinsic and extrinsic influences that inhibit or facilitate decisions over EWL and pensions investment.

Cognitive orientation – embodies knowledge, awareness and beliefs. Beyond simple knowledge deficits, a key consideration is the high level of unknowable aspects associated with pertinent variables, e.g. the uncertainty that surrounds pension investment returns, post-SPA employment options, future health status/longevity and other personal constraints on capacity for employment in later life, such as care of dependants.

Affective orientation – feelings towards retirement, pensions and work. Dominant aspects of emotional orientation surround issues of trust (more saliently lack of trust) in certain stakeholders associated with the EWL agenda, combined with the sense of loss and injustice associated with rises in SPA as well as employer and personal pension shortfalls.

Figure 3.3 Key influences on decisions in relation to retirement, pensions and EWL



Behavioural orientation (intention) – in some degree, influenced by both cognitive and affective orientations. Inertia appears to be the predominant feature of behavioural orientation, characterisable as a reluctance to actively seek information, make decisions or take action. This retreat from engagement appears to be exacerbated by the high levels of complexity and uncertainty surrounding options. Despite almost universal recognition of the need for/benefits of saving for retirement, and arising positive intentions, if unsupported, it is apparent that many do not behave in line with their intentions.

Orientations towards stakeholders – public awareness, knowledge, experience and, in particular, trust in the motives and competence of G/government; employers; and financial services are salient in so far as associated beliefs impact on motivation to interact with each or act on their advice. Understanding these social profiles is important in terms of their utility in playing a role in influencing behaviour, e.g. as sources of information and advice, or in configuring the decision architecture.

Structural factors – choices over EWL and pensions need to be considered in the context of an array of structural and contextual moderating/mediating influences, e.g. employment opportunities, training opportunities; saving/investment options and crucially, the understandings and beliefs (accurate or otherwise) that surround these.

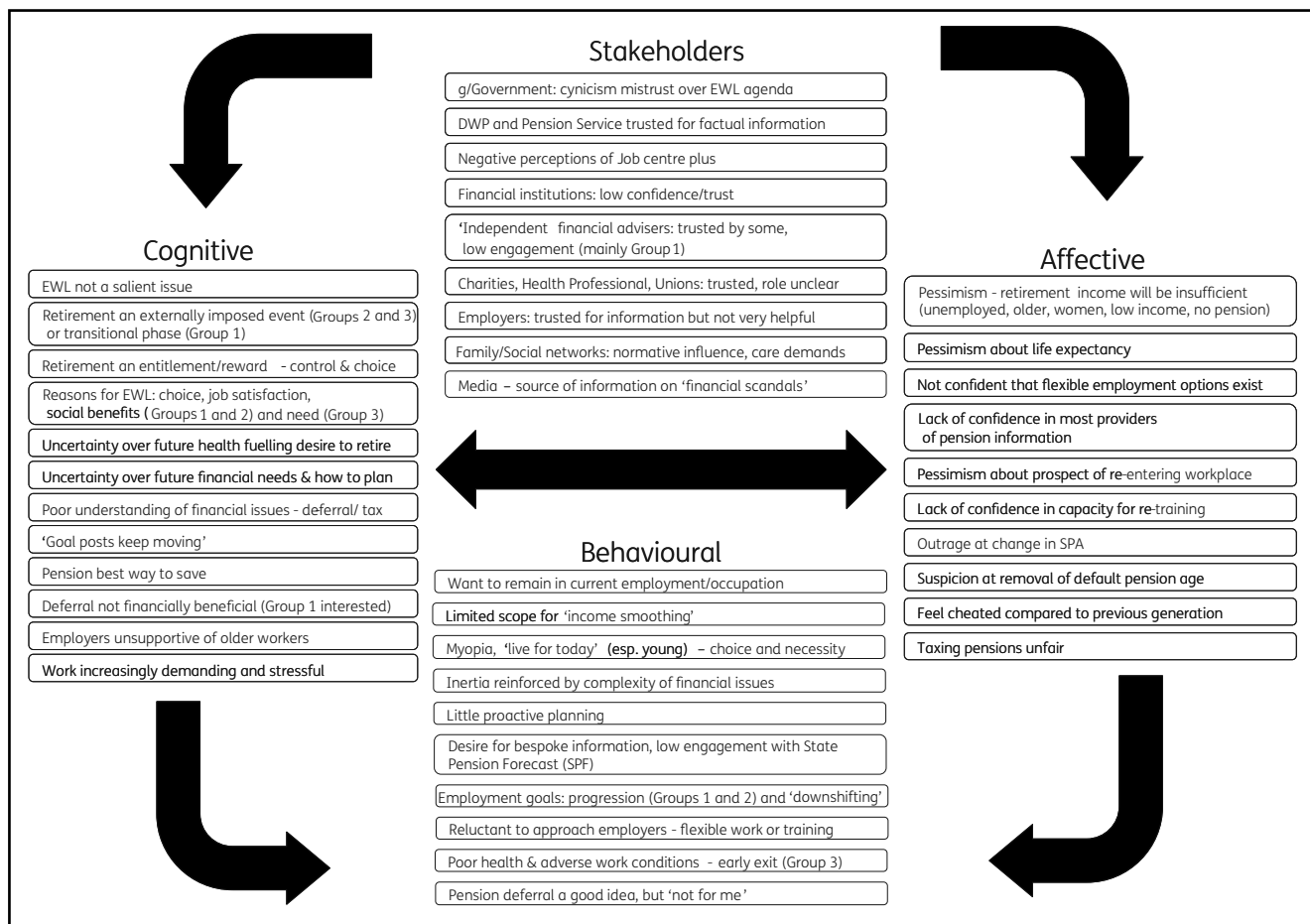
Figure 3.3 provides a global representation of the key influences on decisions in relation to retirement, pensions and work. The relationship between the different variables is characterised as stakeholders and structural factors impacting (positively or negatively) on cognitive, affective and behavioural orientations.

Figure 3.4 aims to typify cognitive, affective and behavioural elements, extending to orientations towards stakeholders. Where possible any apparent occupational/social status differences are highlighted. However, these should be regarded as a broad brush characterisation given that, as elsewhere, they are bounded by the limitations of the underpinning evidence base. The following section attempts to distil this into three separate mental models characterising public representations and orientation towards the three key issues: retirement, State and personal pensions and EWL.

Mental models of retirement

Figure 8 gives a characterisation of universal/shared understandings as well as differences by our three tier social grade characterisation, i.e. professionals/senior managers, middle ranking occupations and the low-skilled (see Section 2.0).

Given that retirement (at SPA) is a much more familiar and culturally normed phenomena than working post-SPA, thought needs to be given to how these norms might be changed. Key influences appear to be societal, employment sector, peers, family and employers.

Figure 3.4 Mental models of variables relevant to EWL³⁰

In particular, it is necessary to keep in mind that options should be considered in the context that any success in shifting individual orientations is likely to be significantly blunted if employer practices do not provide a fertile environment for EWL.

The concept of phased retirement is unfamiliar to most people; hence, the idea of choice in this context is essentially foreign, particularly amongst the low-skilled. Choice over date of retirement is not evenly distributed across the social groups and becomes increasingly subject to external influences (rather than individual disposition/volition) as we move down the social hierarchy.

Despite the fact that there seems to be widespread recognition amongst the public of the logic of need to extend working life due to increased longevity, this does little to erode individuals viewing the need to work longer as unjust, and representing a loss of entitlement (Vickerstaff, 2008; Hedges *et al.*, 2009; Equality and Human Rights Commission (EHRC), 2007). This orientation is unlikely to become significantly eroded in the near future, but may change if EWL becomes normed in the coming decades. The attractiveness of increased leisure time and choice over how one spends one's time dominates conceptions of post-SPA living. However, opportunities to supplement/support these lifestyle choices through, typically, part-time work seem to be attractive to significant numbers and this may offer a useful focus. Evidence of widespread ambitions to retire pre-SPA and the high value placed on this would also seem to suggest that there may be gains from increasing the availability of part-time and other flexible working options for the over 50s. However, the attractiveness of this foreseeably depends not just on the amount of part-time employment available but also its quality

³⁰ Group 1 – Senior managers/professionals; Group 2 – Middle ranking occupations and Group 3 – Low-skilled.

and financial returns. The supply of work by type is not a variable over which individuals have much influence.

The positive framing of early retirement is underpinned by worries and concerns over financing this. There may be benefit from casting (part-time) EWL as a means of supporting a positive retirement lifestyle, with a greater emphasis on lifestyle and work-life balance than work and income per se.

Mental models of pensions

Figure 3.6 offers a model of public understanding of pensions and saving for retirement. As elsewhere, it aims to characterise both universal/shared understanding and segmentation differences by our three tier social grade characterisation.

There is an almost universal perspective that the State Pension affords a subsistence income and acceptance of the need for personal financial provision to supplement this if hardship is to be avoided. There is also a widely held view that there should be State involvement in encouraging saving for retirement as well as State regulation of the employer and personal pensions sector. However, there is less agreement over the legitimacy of g/Government involvement in providing investment advice.

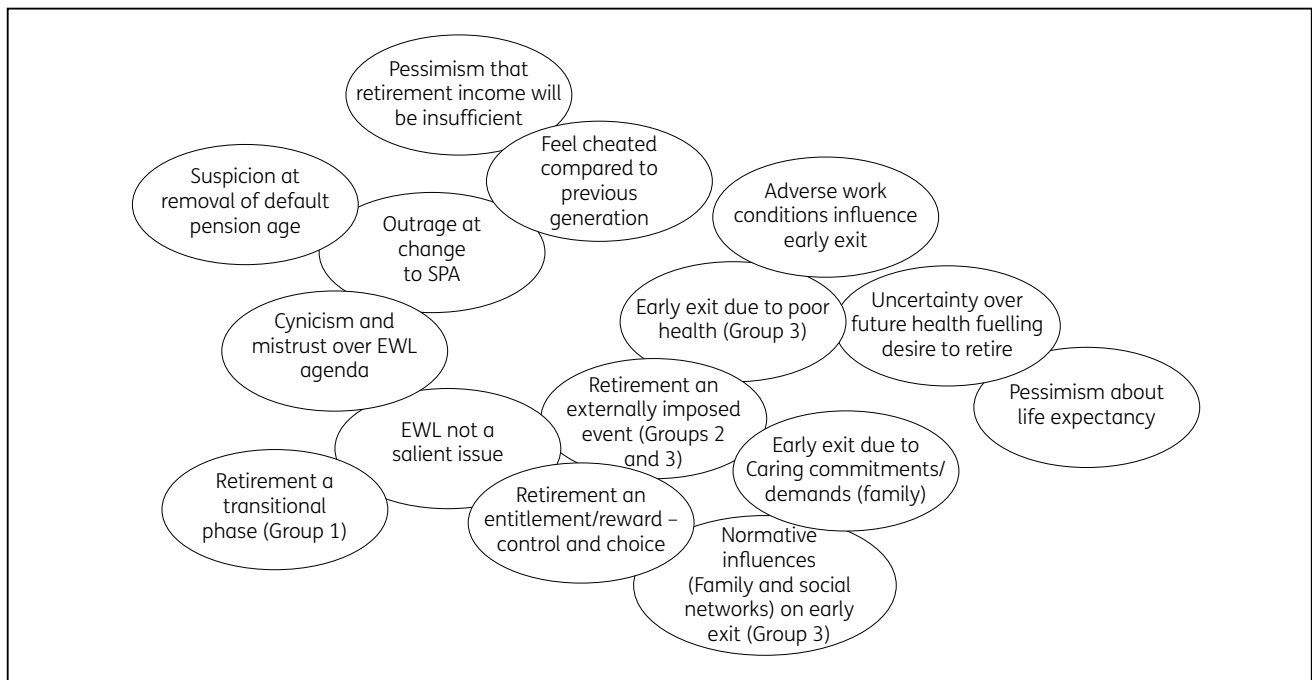
As noted elsewhere, people see value in the idea of investing in a pension, but there is notable scepticism over current options and practices (State, employer and personal). In short, people feel vulnerable and ill-equipped to make good choices and worry about being 'short-changed'. Trust in the State and pension providers is seriously eroded.

People value certainty highly, i.e. knowing how much income (particularly money) they will receive, when and from whom. What some have characterised as 'myopia' does not relate to misunderstanding of the need for income above and beyond the State Pension, but reflects the fact that large numbers of people tend to be focused on financing their current, rather than their future, existence, partly for cultural reasons, partly out of necessity. It is also the case that many people do not consider their retirement income during the early decades of their working life, such that this delay means that the investments they do make are likely to yield modest returns.

Of the range of pension providers, people tend to have most (possibly more accurately, least eroded) confidence in employer pension schemes. In this respect the review evidence indicates that public sector employees tend to have higher confidence than their private sector counterparts. However, it is possible that this difference may have become eroded in view of contemporary debates over public sector pension reforms.

Most people, irrespective of education level, have a poor understanding of pension options; neither do they possess the ability to make accurate calculations of pension values and their retirement income. Moreover, important elements are unknowable, i.e. pension performance/future values and future income needs. The complexity of the area is such that it is unlikely that plugging knowledge gaps through intervention to enhance financial literacy will be effective. Recently announced changes to SPA seem likely to have contributed to the sense of uncertainty over retirement income and may feed latent inertia and disengagement.

Understanding of tax and benefit systems are almost universally modest and underpinned by the fluidity of arrangements. The latter raises questions regarding the impact of manipulations of the tax armaments as a significant motivator for pension investment behaviour. If applied, such incentives need to be intuitive and simple so that people easily understand what is being offered with obvious gains from selecting one option over another. The (heuristic) inference that income gains arising from EWL will be seriously eroded by taxation/loss of benefits, in particular pension (State and non-State) income, is widely encountered (see Hedges *et al.*, 2009). A linked perception is that any pension income lost through EWL can never be recouped. A similar conception underpins (typically sketchy) understandings of pension deferral, i.e. angst over failing to receive **what you have earned/is rightly yours**.

Figure 3.5 Mental models of retirement³¹

Mental models of extending working life

Figure 3.7 characterises public understandings of EWL. As noted elsewhere, a very modest proportion of individuals are likely to actively seek out information on EWL, partly due to fundamental disaffection but also simply because culturally the concept of post-SPA working remains an exception rather than a feature of the natural life course.

Widespread resentment of rises in SPA and associated mistrust in g/Government policy towards older workers tends to fuel cynicism, which is likely to add to public resistance to policy intervention, particularly where it is transparent that the source of information is Government, its departments or agencies. Importantly, it is possible that information from these sources may alienate those who would otherwise be positively disposed to EWL (Vickerstaff, 2008; Hedges *et al.*, 2009).

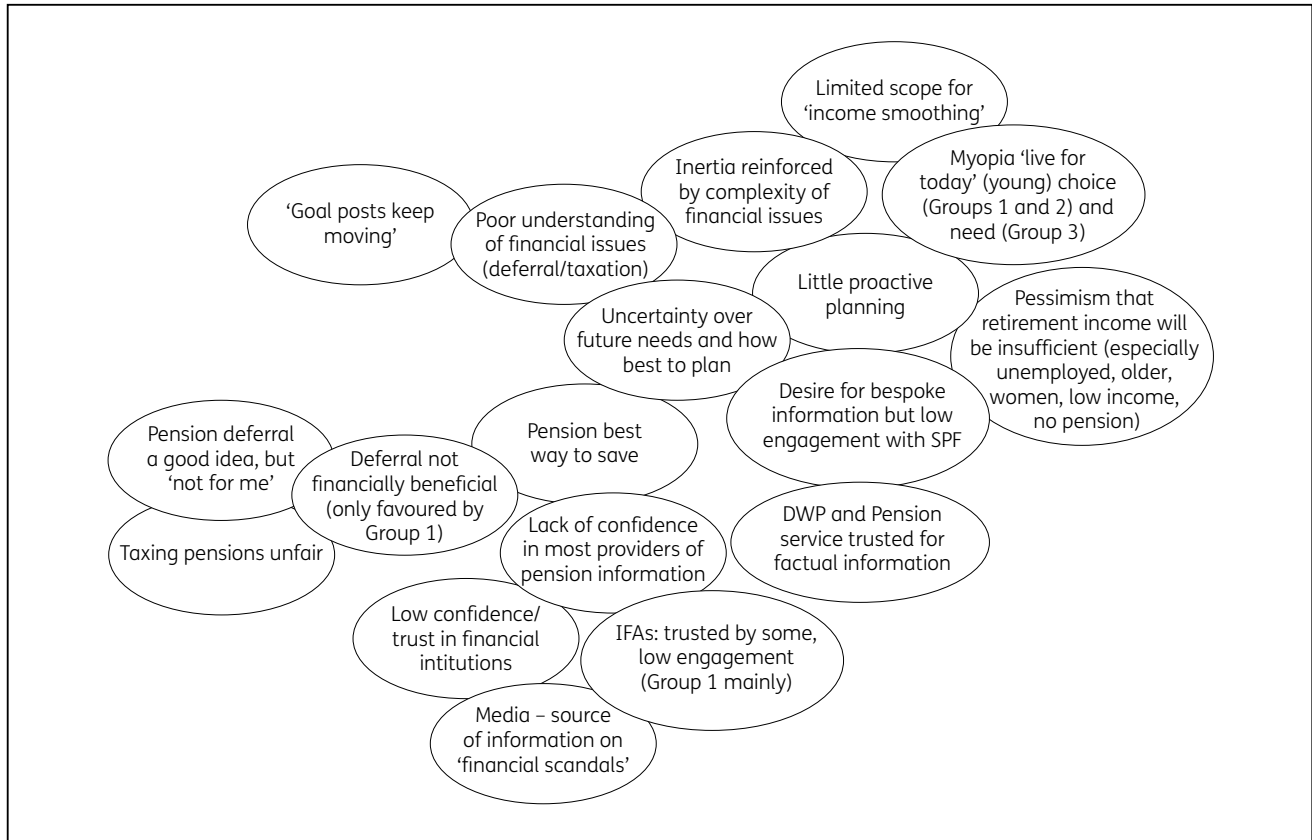
Motivation to EWL embodies both ‘push’ and ‘pull’ factors and the relative impact of these vary by social group. For example:

- individuals with more skill tend to have greater choice but generally less financial need;
- intrinsic satisfaction and social benefits from work appear to be relatively stronger drivers than financial incentives. Thus, stressing the financial benefits appears likely to have a modest impact on the orientations of individuals who experience little intrinsic and/or social gain;
- features of the design of work can render it unattractive to many, e.g. shiftwork/anti-social hours; high job-demands/stress; long hours culture; inflexibility and poor work-life balance. The unpopularity of such features is likely present amongst workers of all ages, but seemingly come into sharp focus in the context of incentivising EWL. Resolution, via fundamental changes in the design of work, largely lies beyond the public policy domain.

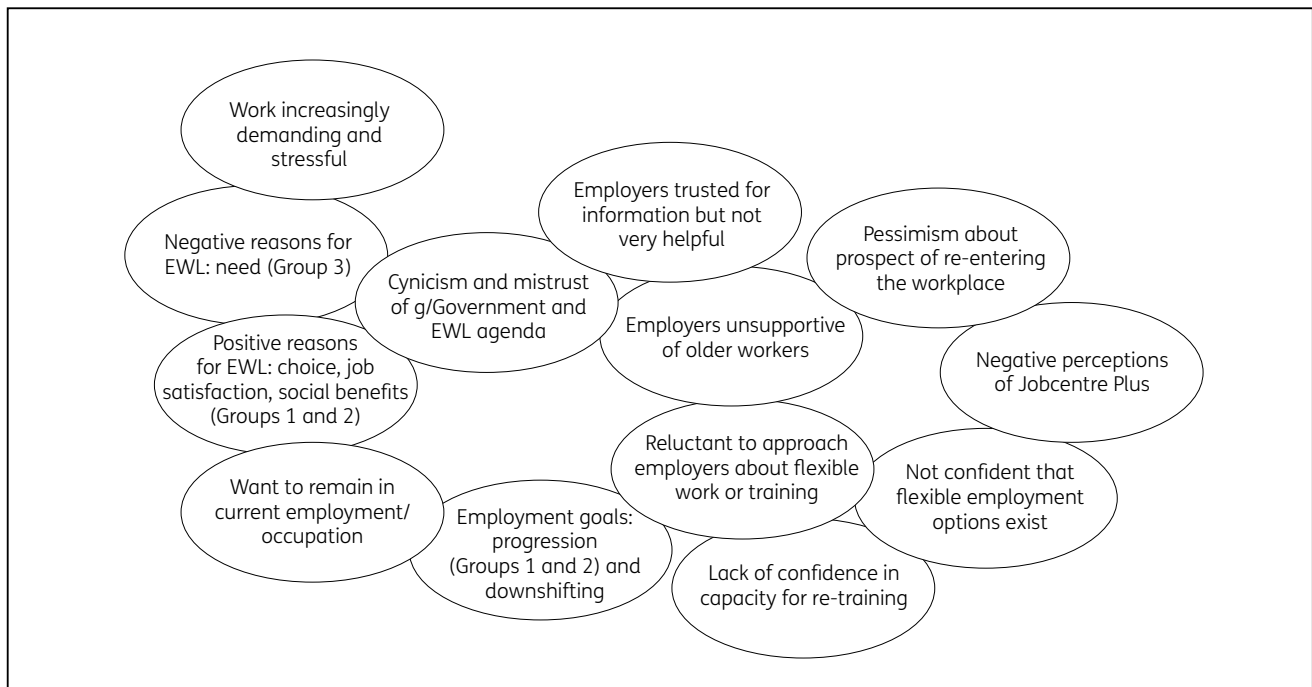
³¹ Group 1 – Senior managers/professionals; Group 2 – Middle ranking occupations and Group 3 – Low-skilled.

Gathering national survey evidence of ‘unattractive’ features of jobs and their prevalence by employment sector has the potential to inform policy thinking over which groups of employees are likely to be disposed to EWL within their current occupation/more disposed to seeking alternative employment. Additionally, an examination of the employee age cohort distribution across employment sectors would provide an indication of any **natural** age-related migration.

Figure 3.6 Mental models of pensions³²



³² Group 1 – Senior managers/professionals; Group 2 – Middle ranking occupations and Group 3 – Low-skilled.

Figure 3.7 Mental models of extending working life (EWL)³³

A core belief is that there are few opportunities for intrinsically attractive work or work that is configured in attractive forms (e.g. flexible or part-time) with one's current employer (the preferred EWL option for most) or an alternative employer. Significant interest in flexible post-SPA work is tempered by the widespread belief that opportunities are few and limited to a narrow band of employees, occupations and sectors. It is also apparent that once people over SPA have ceased working they believe their prospects for re-entering the labour market to be low. This they, primarily, attribute³⁴ to employer resistance.

In short, people have limited knowledge of potential options for EWL and little direct experience of EWL behaviour amongst those they work with. Additionally, employers do not appear to be proactive in tabling EWL options to their employees. Both features tend to limit employees' considerations of EWL and reinforce the perspective that options for attractive work are few.

With regard to training and skills acquisition, the evidence is mixed, ranging from resistance amongst some to widespread reports of a lack of opportunities. What does seem apparent is the widespread belief that employers are reluctant to invest in older employees. The extent to which this belief is an accurate reflection of employer practice is unclear, but, the belief itself (and its behavioural implications) is of relevance from the perspective of policy intervention. However, we would caution against the use of upbeat examples of opportunities if there are grounds for believing that such messages represent a significant dislocation with real world opportunities.

There is strong evidence of widespread underemployment and over-skilling amongst older workers, i.e. working in jobs which are not fully using their skills. This may undermine the perceived value of training/skills acquisition amongst older employees (Atkinson, 2003) and, more fundamentally, would suggest that high levels of policy investment in enhancing training opportunities is likely to produce modest returns.

³³ Group 1 – Senior managers/professionals; Group 2 – Middle ranking occupations and Group 3 – Low-skilled.

³⁴ See Appendix B for a discussion of the scope for bias in causal attribution.

3.3.3 Mental models approach – conclusions

Our attempt at characterising the public's mental models of EWL and pensions reveals a range of knowledge gaps and misunderstandings, as well as beliefs about opportunities and the motivations of stakeholders (for a more detailed account see Section B.7).

There is scope for using these insights to inform the content of communication material and for gathering further empirical evidence on mental models. However, it is important to keep in mind the more fundamental finding that most people do not actively and purposefully seek out information in relation to retirement, (employer and personal) pensions or EWL.

The relative strengths of the mental models approach, over and above traditional communication practice, can be summarised as:

- enhanced quality and salience of key messages through tailoring them to what individuals already know/believe;
- testing communicator assumptions about what the public need (and want) to know;
- charactering orientations to sensitive topics or features of issues and policies likely to cause outrage and disaffection;
- providing insight into who/which sources the public(s) seek information from and in particular who they trust to provide them with information.

4 Framing effects

The identification of an array of context-related biases, termed '*decision framing effects*' (Tversky and Kahneman, 1981) constitutes one of the most significant and enduring contributions from the foundation work on heuristics and biases (see Section B.5).

From the earliest work on decision-making³⁵, it was apparent that:

- people are prone to make non-rational choices (choices that do not maximise their gain);
- people fail to make rational choices in predictable ways; and
- the way in which choices are presented can impact upon options selected.

4.1 Message framing in communication

Work on **cognitive framing** built on these insights, by focusing on how people reacted to systematic variations in the way that choices between alternative outcomes are presented. Specifically, it was found that when people were presented with choices that gave outcomes of equal value, framing the outcome as a 'gain' or a 'loss' had an impact on the option people preferred. Cognitive framing refers to the process of characterising an issue or entity (generally in communication material) in a manner which makes it more likely that they will select one option over another.

Of the array of framing effects identified³⁶ the most widely evidenced relate to 'domain effects', i.e. framing an option as a 'gain' or a 'loss'. Thaler and Sunstein (2008) make much of framing effects, construing them as an example of ways to nudge people to select one option over another (see to Section 5.2). For many, but not for all issues, people tend to select options that minimise losses.

In their classic experiment, Tversky and Kahneman, offered their participants two choices (of equivalent objective value) over finding a cure for a life threatening disease. The only difference between the options related to the manner in which risk was portrayed in each. Their findings revealed that respondents tended to choose the option that emphasised the 'number of lives saved' (positive frame), compared with the alternative, 'number of lives lost' (negative frame).

(Tversky and Kahneman, 1981)

While it is probably true to say that, under a wide array of circumstances, people are **loss averse**, effects are more subtle and complex than this. For example, people tend to prefer a modest **sure thing/sure win** if it is available, as opposed to a long-odds probability of a larger win, i.e. they seek certainty – such as a modest guaranteed pension. However, people are equally disposed to risky, long-odds options (a **chance of success**) when faced with a certain loss, e.g. placing your last £5 on a 100:1 outsider in the Grand National.

The attractiveness of domain effects to risk communicators relates to the finding that playing on such decision-making bias offers scope to nudge people to make better choices (see Thaler and Sunstein, 2008).

³⁵ Framing effects can be a engineered feature of decision contexts beyond the written word, i.e. structural and cultural influences can operate as decision frames.

³⁶ See, for example, Kahneman and Miller, 1986; Linville *et al.*, 1987; Fagley and Miller, 1990; Lindberg and Frost, 1992.

4.2 Contextual framing effects

While the effects of information framing have been widely demonstrated under experimental conditions, rather less is known about the variables that might engender (or prevent) framing effect's other than use of the written word to frame an issue.

Real life decision-making embodies elements of **natural and man-made framing** effects. An example of a natural effect is the individual's position in the life course, i.e. as people grow older they become more sensitised to how many healthy years of life they have remaining, and may become increasingly reluctant to spend them at work. Man-made effects include gains and losses associated with tax and benefits systems.

4.3 Framing effects conclusions

Domain framing effects are widely applied within the public health communication material. They are, for example, encountered in contemporary smoking cessation campaigns, where the emphasis has shifted beyond focusing on negative health effects, to stressing intuitive gains, such as *'having more healthy years to spend with your grandchildren'*. Similarly, but perhaps less positively, in commercial advertising and labelling of foodstuffs we can observe the tendency for producers to frame products as *'X% fat free'*; rather than containing *'Y% fat'*, etc.

However, a caveat to the use of message framing is that if it is too transparent there is a risk that it may *'... lead to suspicions of manipulation.'* (Fischhoff, 1995). Care also needs to be taken over the framing of negative consequences, e.g. framing certain social groups as vulnerable could have the undesirable effect of increasing their social marginalisation, while at the same time reducing the degree to which members of the wider population identify with them and/or feel vulnerable themselves. This may inhibit (desirable) preventative/precautionary action on their part, e.g. investment in pensions. It could also sponsor resentment and pose a challenge to the social contract that underpins features such as redistributive tax and benefit arrangements.

There are a number of limitations to the framing concept, particularly where its application is restricted to use in communication material:

- It implicitly assumes that outcome alternatives are known, or knowable. This is often not the case in real world decision-making, many options will be likely to embody some degree of uncertainty. This is largely true of pension choices.
- Some decisions do not lend themselves to a positive frame, as choices may be between two unattractive options, e.g. working beyond State Pension age (SPA) versus living on a subsistence income. In such instances, gains are perhaps, at best, construed as a minimisation of losses (see Whyte, 1989).

A significant proportion of the evidence on message framing effects is now widely regarded as overstating the impact on behaviour, due to the fact that findings were based on behaviour intention, rather than actual behaviour and the evidence suggests that intention is a rather weak indicator of behaviour change (see Sections B.1.11 and B.5.2.3) .

The most defensible conclusion is that message framing can be a positive feature of communication material, but is unlikely to yield high returns. At a fundamental level it is only relevant to those population segments that are sufficiently engaged with extending working life (EWL) and pensions issues to consume communication material.

Table 4.1 Examples of EWL and pensions *loss* and *gain* frames

Issue	Frame
Engagement with financial advisers over post-SPA planning	Loss – re: focus on minimising tax liabilities.
Pension deferral	Loss
Early post SPA death	Loss – re: loss of pension; loss of leisure ¹
Age-related debilitating ill-health	Loss – re: loss of quality of life/leisure ¹
Belief in loss of pension income due to tax	Loss
Early retirement	Gain – re: greater autonomy/leisure
Rise in SPA	Loss – re: just reward for work; erosion of social equity
Employer lump-sum payments (offsetting reduced pension values)	Gain
Early retirement/voluntary redundancy	Gain
Flexible working pre-SPA	Gain
Voluntary pensions contributions	Loss

¹ For most – not offset by financial gain from earned income/tax benefits.

Although under articulated by authors such as Thaler and Sunstein, nudging behaviour in public policy contexts is not just about configuring new choice architectures (set of available options and their actual/perceived consequences), it requires consideration of established nudges and their consequences on behaviour. The world of work and investment might reasonably be construed as being **full of nudges**. Some relate to the configuration of structures and features, such as elements of the tax system or employer retirement policies, others to people's beliefs surrounding this (which may well be incomplete or contain inaccuracies – but which, nonetheless, impact on behaviour) extending to social norms (e.g. referenced to the place of work, locale, social group and operating at a societal level). This area is under-researched (see Fagley and Miller, 1990) and would benefit from further empirical exploration, generally as well as within the context of EWL and pension-related behaviour. However, a range of relevant insights can be derived from our review (see Table 4.1).

5 Motivating public engagement

Beyond communication interventions aimed at ‘plugging knowledge gaps’ there are a number of insights and techniques that lay claim to having a positive impact in motivational terms. As outlined in the recent Cabinet Office and Government social research guidance publications *Mindspace* (Dolan *et al.*, 2010) and *Behaviour Change Models* (Darnton, 2008); theoretically informed approaches to intervention tend to draw upon an array of socio-cognitive psychology models of behaviour change and economics insights on rational decision-making following the publication of the influential text ‘nudge’ (Thaler and Sunstein, 2008). This section will summarise and offer comment on the applicability of these perspectives within the extending working life (EWL), retirement planning and pensions domains.

5.1 (Health) psychology models of behaviour change

The discipline of psychology offers an array of theoretically informed models of behaviour change. These have been widely applied in public policy contexts, in particular within the context of lifestyle-health agendas, e.g. with the purpose of motivating safe sex, healthy diets and smoking cessation behaviour (see Section B.1.11).

In varying degrees, these cognitive and socio-cognitive (‘Value expectancy’) models (notably the *Theory of reasoned action*, Fishbein and Ajzen, 1976; the *Theory of planned behaviour*, Ajzen, 1985; and the *Health belief model*, Becker, 1974) reflect elaborations of economics rational choice models, in so far as they assume that behaviour is a product of individuals weighing up the relative costs and benefits (in at least quasi-rational terms) of the consequences of alternative courses of action, behaviour change hinging upon individuals coming to the conclusion that benefits exceed the cost of change.

A complementary perspective is to view the process of behaviour change as a continuum. This is routinely characterised as a series of cognitive stages that individuals pass through from initial contemplation of an issue, e.g. considering investing in a pension, via attitude reorientation, to sustained behaviour change. The *Transtheoretical model* (Prochaska and Di Clemente, 1986) and the *Health action process approach* (Schwarzer, 2008) are the most widely encountered stages of change models.

In essence, all of these models share a theory of change rooted in the premise that increasing people's awareness of risk and making them feel vulnerable to the negative consequences of **undesirable** outcomes, while increasing their focus on the gains from change will lead to a reorientation that motivates attitude change, this, by inference, translating into a positive change in behaviour. Established social and cultural norms (observation and imitation of the behaviour of others) are typically characterised as a barrier to change; but can also '*permission*' change. The change in public orientations to smoking offers a good example here, the last two decades having witnessed a marked reduction in levels of social approval of smoking, to the extent that the norm in many (but not all) social contexts is not to smoke. EWL is currently not culturally normed in this way, remaining an exception, but may become more so over coming decades.

Communication interventions that draw upon these models typically aim to emphasise aspects relating to personal vulnerability, linked with attempts to boost self-efficacy (people's belief in their ability to change their behaviour). Stages of change approaches tend towards 'counselling' type support aimed at individuals, rather than the media-based communication approaches that more typically draw upon value expectancy models.

Primary criticisms of the health behaviour change models are based on claims that they:

- overlay rationality and autonomy (choice);
- overlay the degree to which attitude change translates to behaviour change;
- are too focused on individual orientations, underplaying structural barriers to change; and similarly
- underplay social and cultural (particularly normative) counter-influences.

The impact of interventions based on these models appears to be greater where the approach extends beyond passive communication activity (advertising literature, web pages, etc.) to active interventions, e.g. community-based initiatives, group therapy, and counselling type activity (Jepson *et al.*, 2006). However, evidence of impact is stronger for enhancing public knowledge/awareness than it is for sustained behaviour change. As the authors of a recent National Institute for Health and Clinical Excellence (NICE) funded review succinctly conclude, '*There [is] a lack of evidence to support conclusions regarding the efficacy of [health psychology] models or theories related to changing knowledge, attitudes or behaviour.*' (Jepson *et al.*, 2006). The overarching finding is that behaviour impact rates tend to be modest or low, tending to be further eroded with the passage of time.

NICE has produced guidelines for policy-makers on how interventions based on psychology behaviour change models should be developed, implemented and evaluated, but eschews the adoption of a particular theoretical model or standpoint in favour of a pragmatic approach drawing on key concepts from different perspectives.

The use of cognitive and socio-cognitive psychology behaviour change models within the EWL and pension domains must be considered within the context that:

- almost all people recognise the need/advantages to save for retirement/having a higher income in old age. Levels of angst over retirement income are already high. Thus, a **health model** theory of change, predicated on the basis of amplifying perceptions of personal vulnerability and the (financial) gains from EWL and pension investment may be of limited value. Both are already widely recognised, but commonly do not appear to translate into self-protective behaviour;
- positive individual orientations to EWL and/or pensions may be held in check by broader beliefs, e.g. low trust in Government, the finance sector and the actions of employers;

- most people abstain/retreat from active decision-making over pension investment, and appear to be more disposed to reacting to opportunities to EWL, rather than actively seeking them out. People tend to exhibit low self-efficacy in these areas;
- if people are to progress through a series of stages that culminate in sustained behaviour change they are more likely to travel this route if they are actively supported or nudged by being presented with options, rather than being passively equipped with the tools (generally information) to make their own choices;
- to achieve maximal impact from cognitive behaviour change models it is important to provide a fertile context, through related measures that address cultural and structural barriers to behaviour change, e.g. tax and benefits implications; employer policies and practices.

Stages of change models are principally advanced as a pathway for the individual, but it is also possible to use the concept to characterise proportions (segments) of the working age population. Our three-tier social grade characterisation could be interpreted in this way. There might also be scope for characterising other segments in this way, e.g. profiling differences between different employment sectors.

Similarly, employers might usefully be encouraged to ‘triage’ their employees’ disposition to EWL, characterising individuals as ‘high resistance’, ‘pre-intenders’, ‘intenders’, or similar, which perhaps if undertaken a couple of years³⁷ before State Pension age (SPA), might form the basis for configuring bespoke support/change packages fitted to each individual’s classification. By extension, such activity could be configured to take advantage of evidence that people are more disposed to adopt positive pension investment behaviour at **key life-transitions**, e.g. point of recruitment, marriage, birth of a child, etc.

In conclusion, the scope for applying psychology (health) behaviour change models within the EWL and pension domains, is perhaps best construed as constituting a component of the array of tools and techniques that might enhance a broad-based intervention strategy, i.e. it would be a high risk strategy to restrict intervention to activity based on these models alone, given their chequered reputation and the high probability of modest rates of change (see Jepson *et al.*, 2006).

5.2 Nudges – decision architecture

Individuals can be inconsistent, and are prone to making decisions they regret in later life, e.g. in behavioural experiments and in everyday life it has been possible to demonstrate that individuals are sensitive to loss. Behavioural economists highlight the importance of contextual effects and that ‘behavioural anomalies’ (heuristics and biases) are systematic (see Section B.1.12). With this in mind, it has been suggested there is scope for designing public and employer policy that will go at least some way towards correcting the ‘mistakes’ (non-rational choices) that people make.

5.2.1 Nudging better choices

Building upon earlier insights (see, in particular, Kahneman and Tversky, 1974; Tversky and Kahneman, 1981), Richard Thaler and Cass Sunstein (2008) advocate ‘*libertarian paternalism*’. Their rationale for policy delivery claims to be paternalistic (to stop individuals making **poor decisions** that negatively impact on their future well-being), but also lays claim to being libertarian, in so far as choice is retained, i.e. individuals are not forced to comply, they are nudged (helped) to make the better choices. The core premise is that **policy-makers know what is good for people** and should act as **choice architects**, in order to overcome undesirable effects attributable to behavioural anomalies.

³⁷ Establishing the optimal timing of this would benefit from empirical investigation.

Critically, the nudge perspective represents a divergence from the education deficit and psychology (health) behaviour change perspectives, in so far as the focus is not on the individual per se, but on finding ways to engineer the context in which individuals operate. It is not a rejection of, or necessarily incompatible with, these more established perspectives, rather it is supplemental, but one that lays claim to addressing more fundamental influences on decision-making. Thaler and Sunstein argue that, as framing³⁸ is inevitable, it is better to frame individuals' choices to enhance their welfare. And, by extension, that there is a policy need to redress established nudges that engender perverse motivations.

Based upon the amassed evidence, the following conclusions can be drawn with respect to the scope for policy nudges in the EWL and pension domains:

- Interventions should make the most of the benefits of automatic enrolment pension arrangements (beyond the forthcoming 2012 State automatic-enrolment scheme). Configuring pension investment (State and employer) options as default enrolled-in counteracts weak motivations³⁹ to invest in the future. There are also potential benefits from framing saving for retirement as a 'rite of passage'. The sense of loss (of income) is also likely to be reduced where this is deducted at source.
- Policy should treat individuals as 'young' for as long as possible. For example, State and employer sponsored education and training provision is widely perceived to be skewed towards the young. This reflects the nature of the work-life-course, but is also a source of social exclusion and is likely to contribute to older employees' perceptions of winding-down. Interventions with education providers and employers should focus on reducing this disparity.
- Policy should be designed to change individuals' perception that choice is 'indivisible' and 'irreversible', in particular that retirement represents a cliff edge. The more irreversible a decision is framed, the greater the likelihood that individuals will fear they will incur a loss if they do not take the opportunity to retire. Interventions that seek to embed amongst employers' policies that permission (norm) post-SPA working with choices over working hours and date of retirement should help to erode the loss frame.
- There may be benefits from finding ways to induce employers to seek commitment from their employees to EWL when they are in their middle age, rather than close to the point of eligibility for State Pension, where any sense of loss of leisure time/entitlement might assume a stronger focus⁴⁰.
- Financial incentives are likely to be more effective if portrayed as loss, i.e. people will incur a financial penalty if they retire, rather than as an income gain, from continuing to work. Similarly, the additional pension payments to an individual who works longer, e.g. from age 65 to age 68, can be framed as the loss they would incur if they were to retire earlier. Individuals tend to be more responsive if they feel they are avoiding a financial loss.
- Financial inducements tend to be more effective if offered as a lump sum payment. Evidence from the USA indicates that individuals are more willing to postpone retirement if the inducement to work includes a lump sum payment, particularly if realisable in the relatively near future, e. g. for working until SPA+2 years.

³⁸ Framing here encompasses: message framing **and** decision environment.

³⁹ Most individuals do not 'rationally' optimise with reference to a life cycle model. Younger people, in particular, tend to focus on loss in the here and now, rather than the distant future, which results in underinvestment.

⁴⁰ Establishing the optimal timing of this would benefit from empirical investigation.

- People are more likely to be induced to retire early where a lump sum is offered by their employer as an incentive to withdraw, despite the fact that the long-run value of lost wages and pension contributions will almost certainly outweigh this. People also tend to be induced to select pensions options offered by employers that trade a larger lump sum in the near future for reduced income (pension value) in the more distant future. Nudges of this type potentially engender perverse motivations and negative consequences for individuals and the State.
- State and employer policy can also be designed to make use of inertia. This almost certainly lies at the heart of the success of default enrolled-in pensions. Similarly, individuals tend to procrastinate because they are afraid of making losses. Policy can be designed to offset inertia by stipulating ‘transaction deadlines’. If financial incentives are offered to encourage individuals to work longer, ‘transaction dates’ can be set to encourage individuals to make decisions, e.g. to qualify for financial inducements to EWL individuals must agree to the scheme by a specified date (or by a specified age).
- Policy that focuses on inertia can also offset inconsistency (and lack of self-control), e.g. employment contracts can be written to induce individuals to agree contractually to increase pension investment proportionately as their wages increase. While, desirably, retaining an opt-out option, due to inertia, it is likely that for the majority savings will increase.
- Money is not **fungible**⁴¹. Many people manage their spending and savings by using different mental accounts, that is, they imagine different ‘pots of money’ (mental accounting), e.g. money set aside for utility bills, money set aside for leisure. Policy can be designed to take advantage of this. The evidence suggests that willingness to save differs when individuals focus on different mental accounts, e.g. if taxation policy were to create incentives to change the way individuals are paid this would be likely to impact on willingness to save. There is also evidence that individuals save more from lump sum payments, e.g. bonuses, than from an equivalent increase in their regular wage payments. There may be benefits from exploring how mental accounting traits might be used to increase saving for retirement, and perhaps most saliently different aspects of retirement. This issue would benefit from further exploration, there being no known published findings dedicated to retirement saving/income provision.
- Individuals are influenced by the way they see others behave. Public policy and most saliently employers’ policy over EWL and pensions can be configured to transmit signals about the way others behave. The recently announced rises in SPA may have an impact in terms of gradually eroding established retirement (likely aligned with incremental rises in SPA). However, employer practices are foreseeably a more immediate and salient social reference.
- Individuals are disposed to fall back on heuristics (basic impressions and rules of thumb) partly as a retreat from complexity and partly due to low motivation to engage with detail. The evidence suggests that policy is likely to be more effective if initiatives focus on simplifying decisions, rather than on attempting to train individuals to deal with complex decisions. Thaler and Sunstein (2008:112) report on the limited impact of training (they conclude ‘... *teaching is hard!*’). By comparison, simplifying choices can be more effective. The UK Government’s recent proposal (March 2011) for a move to a flat-rate State Pension and the removal of top-up payments for lower earners through the means-tested Pensions Credit could be seen positively in this respect. It is also possible to simplify decisions by ‘channelling choice’. ‘Too much’ choice can be counter-productive. Thaler and Sunstein (2008) argue that individuals are more receptive if they are asked to choose between small numbers of pension options than a wider array. Channelling choice is also relevant when individuals choose to work longer. They are more likely to respond if they are able to choose from a small number of opportunities to stay with the same company than if they are asked to choose from all of the opportunities available in their local labour market.

⁴¹ Interchangeable or moveable in the sense of substitution.

For a detailed discussion of behavioural anomalies and their implications for EWL and pensions policy, see Appendix B. This section also deals with the difficulties that must be addressed if policy is to be designed to effectively ‘nudge’ people to change their behaviour. The above is premised on the proposition that it is possible to use evidence of behavioural anomalies to design policy to correct ‘mistakes’, i.e. errors of judgement that people will foreseeably come to regret in later life.

5.2.2 Extensions of the nudge concept

While public policy-making constitutes their primary focus, Thaler and Sunstein also highlight the scope for others to play a role in constructing the choice architecture; notably employers. One of these authors’ favourite examples is the way that their university (their employer) cafeteria director nudges consumption choice through the way in which food is displayed to customers. However, these authors only offer a light touch regarding their consideration of the role of employers.

In the context of EWL and occupational pensions the scope for employers to craft the choice architecture can be seen as significantly greater than policy-makers can achieve in the wider public context. The reason for believing this is that employers have significant control over a broader set of salient parameters, including the potential to impact upon structural elements such as human resource systems, aspects of job design. In particular, they play the key role in defining the background climate which impacts on social and cultural norms in relation to EWL.

The relatively greater strength (impact) of behaviour change interventions focused on aspects relating to organisational climate (in essence choice architecture) compared with a direct individual (employee) focus is a long established insight within the broader research evidence based on the employee well-being and cultural change (see, for example, Hale and Glendon, 1987; Cox and Flin, 1998).

6 Designing interventions

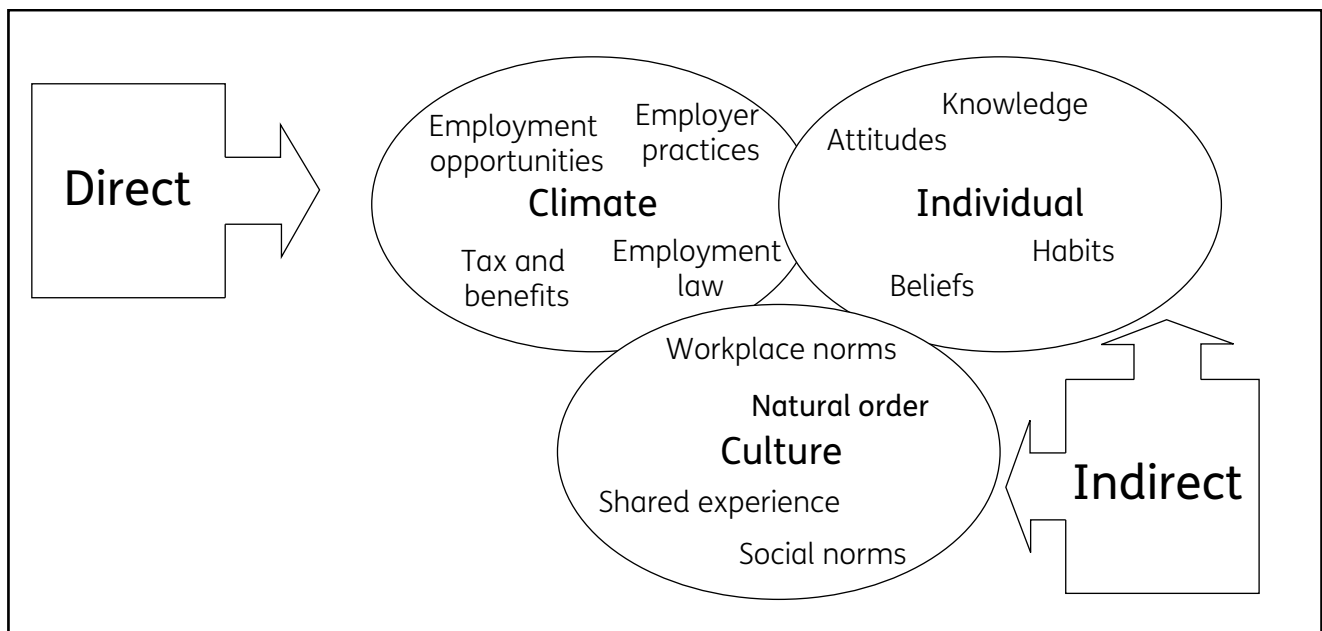
6.1 Direct and indirect approaches to behaviour change

As noted in Section 1.1, a key distinction that can be made is between interventions aimed directly at individuals and interventions that are aimed at impacting upon the context in which individuals operate: in essence, direct and indirect approaches (Figure 6.1).

Direct approaches to intervention focus on individuals and represent an attempt to change their knowledge, attitudes and behaviour in relation to what is essentially a constant world. Examples include smoking cessation, greening behaviour and, historically, drink driving. This reflects the primary focus for the (health) psychology behaviour change models outlined in Section 5.1 (also see Section B.1.11).

By contrast, indirect approaches seek to change behaviour through influencing structural background climate and cultural elements, i.e. a focus on the contextual drivers of behaviour, e.g. features of tax and benefit systems, or changes in employer practice. The ‘nudge’ perspective reflects this. In the case of employer practices their role in defining (and norming) the extending working life (EWL) climate in the workplace will tend to have an impact on employee culture, e.g. more opportunities for, and increased rates of take-up of, EWL in an organisation will foreseeably erode established ‘cliff edge’ retirement norms.

Figure 6.1 Direct and indirect approaches to behaviour change



Decisions over the relative emphasis on individual or situational variables are dependent upon the behaviour(s) to be influenced, and the scope for policy-makers to influence relevant variables. In the context of EWL and pension choices, including whether to enrol in an employers scheme or not, the review evidence indicated that most individuals are **not** options seeking and are **not** actively engaged in considering options, i.e. they are more disposed to react to options that are put before them. Employers potentially play a key role in offering these options. Therefore, interventions which aim to change employer practice, to nudge positive decisions on the part of employees should be seriously considered.

Indirect approaches to intervention, via the employer route, are considered to embody the potential for generating higher rates of impact on employee behaviour than approaches aimed directly at individuals. However, intervention via the employer is bounded, in so far as it is better suited to certain demographic groups, notably those in stable employment with a single employer. Certain sectors, e.g. construction, offshore oil and gas and to some degree, agriculture/horticulture, are characterised by notable fluidity and flux in terms of employment arrangements. In these and other sectors with comparable characteristics, a direct individual focus on workers to impact on knowledge and attitudes might represent the more viable option.

Additionally, policy intervention options over selecting direct and indirect approaches is not a simple either/or choice, rather both can be applied in complementary manner. Furthermore, it should also be kept in mind that employers can also be used as a conduit for delivering direct interventions, e.g. transmitting (distributing) communication material aimed at motivating individuals to work longer and make better financial provision for retirement.

6.2 Theory of change

The relative influence of the situation versus the individual as a determinant of behaviour has long been a topic of debate among social scientists. Viewing each as opposite ends of a continuum, situationalists construe behaviour as a function of context, whereas individualists hold that human behaviour is the product of personal volition. Most contemporary social scientists would conclude that neither position is tenable. *'Asking whether behavioural variance is due to either situation or persons. ... is analogous to asking whether blood or air is more essential to life.'* (Endler, 1973). Arguably, a more sensible question is how do individuals and situations interact and impact on behaviour, referenced to the issue/phenomena under consideration?

This distinction is important from the perspective of intervention to motivate EWL and pension enrolment/investment, in so far as it suggests that a focus on one to the exclusion of the other is likely to seriously undermine the impact of the behaviour change agenda. However, a caveat to this is that different target groups offer varying scope for intervention.

For example, for those who are currently in employment, the employer can play a key role in configuring the choice architecture (situational influences). There are also grounds for viewing this as the preferred option given the strong evidence of normative and conformity influences transcending individual differences as drivers of cultural change (see Hale and Glendon, 1986; Cox and Flin, 1988).

In **less controlled** contexts, e.g. where the focus is on influencing those who are not currently in work, a core emphasis on the individual via education-based publicity initiatives would probably be the default choice, given the modest scope for impacting on situational influences (beyond fundamental push-orientated adjustments to benefit entitlements).

The distinction between a focus on individuals or situations is of acute relevance when considering intervention options because the tools and techniques that can be applied are quite different, in important and fundamental ways.

As noted in Section B.3, the scope for developing interventions that focus on individual and situational influences varies with respect to the characteristics of the target audience.

Key distinctions that can be made are between individuals/groups who are:

- in regular employment with the same employer;
- in regular employment with plural or varying employers;
- in regular employment but seeking employment with a new employer;

- out of work pre-State Pension age (SPA);
- out of work post-SPA.

Direct (individual focused) interventions are possible with all five groups. In broad terms these should follow a pathway aligned with the schematic model detailed in Figure 6.2.

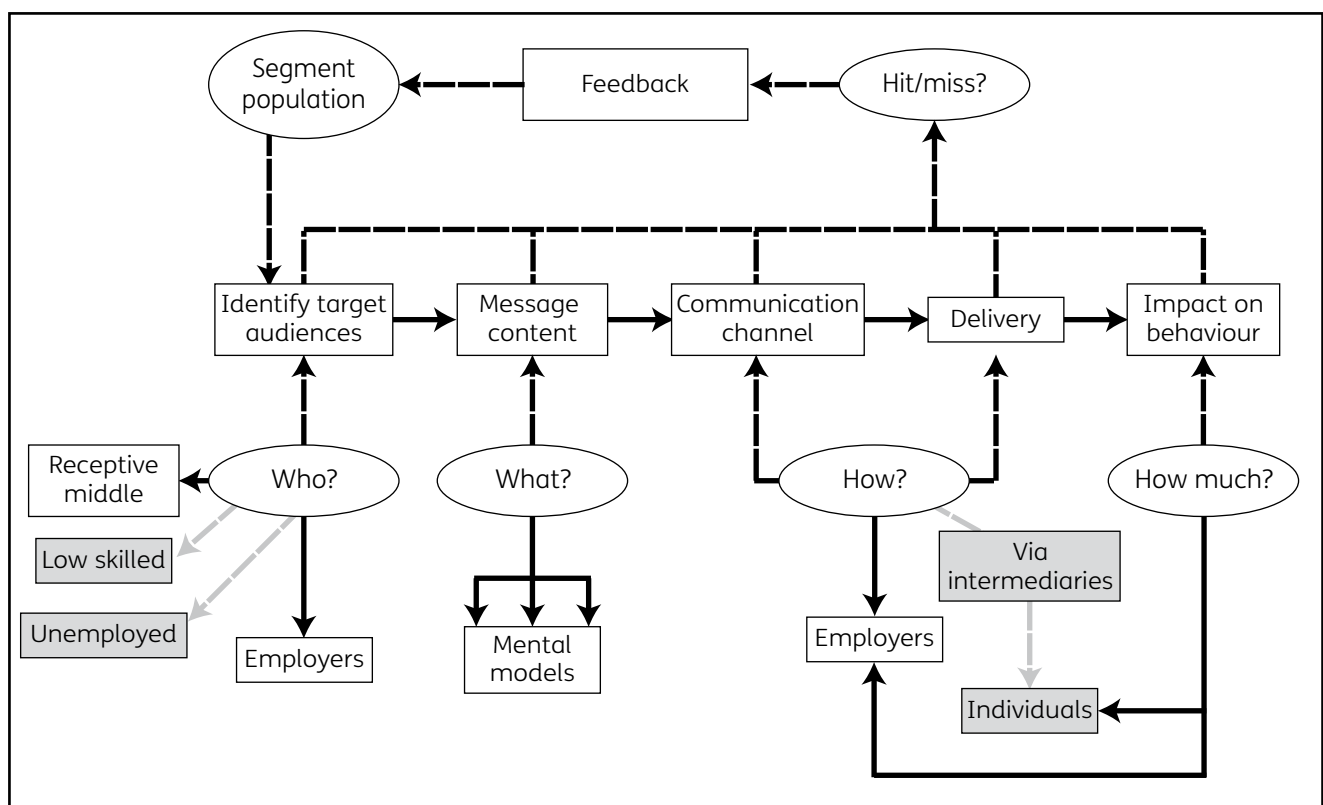
Beyond universal nudge stratagems, e.g. pension automatic-enrolment defaults, or changes in tax arrangements, the scope for indirect, situation focused intervention is variable between the groups and greatest for those currently in stable employment with a single employer.

6.3 Direct interventions – individuals as the focus for change

Direct behaviour change interventions are aimed at individuals and are most commonly encountered in the public health domain. The traditional treatment model has been supplemented in recent years with an unprecedented focus on prevention, e.g. attempts to engender changes in health and lifestyle behaviour and take-up of health screening (see, for example, Black, 2008). Here there are transparent synergies with embedding positive EWL/pension investment behaviour, in so far as they share the objective of attempting to engender changes in behaviour that impact on future well-being. Public health derived, behaviour change models/techniques are discussed in detail in the review of evidence (see Appendix B).

For most practical purposes the scope for individual focused interventions is limited to education (**plugging knowledge gaps**) and awareness-raising. Fundamentally, this embodies the assumption that current behaviour reflects (some degree of) ignorance, and that making people aware of the issue (and related behaviours) will be sufficient to motivate behaviour change. However, the balance of evidence is that low awareness and poor knowledge do not seem to be the primary influences on EWL and pensions investment behaviour.

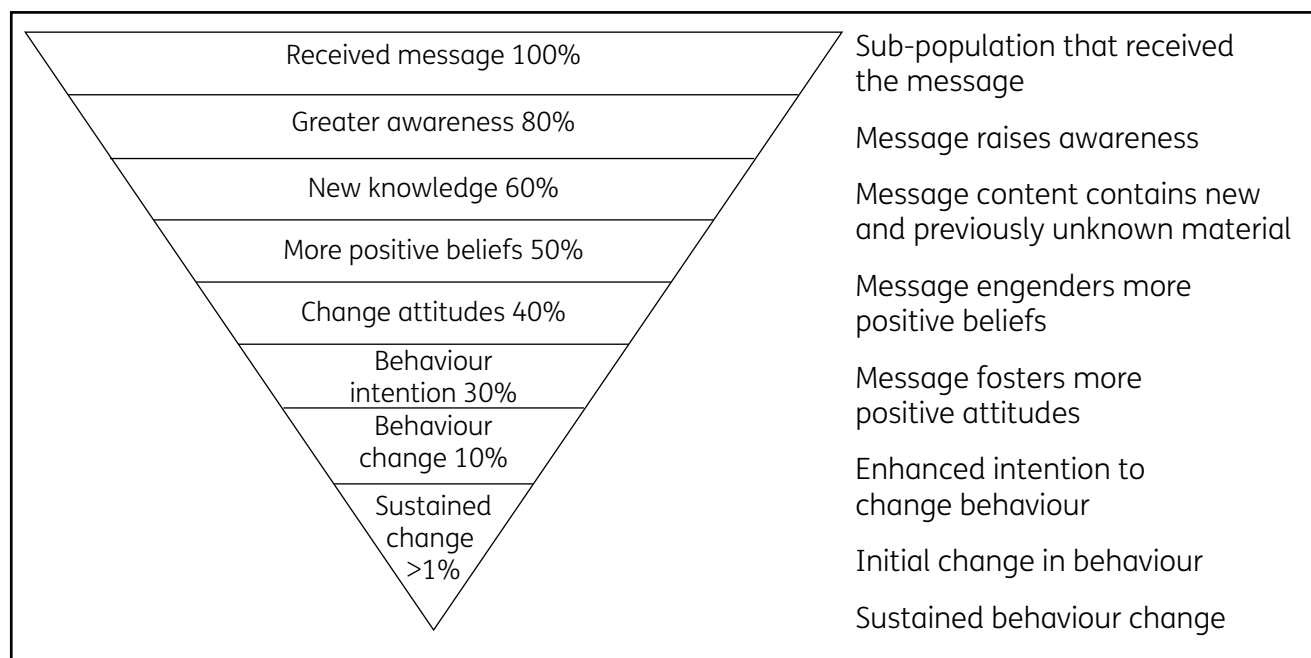
Figure 6.2 Communication intervention pathway



Assuming that the configuration of message content is optimised through good practice in its development, e.g. taking account of insights from the mental models perspective (see Section 3.3), message framing (see Section B.5) and broader insights on effective communication (see, for example Covello *et al.*, 2004), the pathway from message transmission to behavioural impact is perhaps usefully construed as passing through an array of filters.

- **Penetration** – Even when well targeted, the communication is unlikely to reach all relevant individuals. Careful planning, taking account of segmentation evidence and a broad, informed, perspective on transmission pathways should help minimise wastage in this respect.
- **Dispositional effects** – Differential levels of receptiveness and motivation to engage with the issue between sub-sets of the target audience. Certain social groups can be predicted to be more amenable to engaging with EWL and pensions (see Appendix B).
- **Locus of control** – Certain social groups are better placed to act on the information offered than others, in so far as they enjoy or perceive relatively greater scope for control over their future. There are linkages with level of skill and employment sector norms.
- **Profile of source** – The trust and credibility/competence profile of the source has potential to either amplify or attenuate rates of engagement.
- **Relevance** – The message content must be relevant and well focused on meeting the information needs of the target populations(s) (see Section B.4).

Figure 6.3 Communication impacts on behaviour – rate of attrition – an heuristic model



The science surrounding foreseeable metrics of impact is far from exacting. However, almost all evidence points to education initiatives producing modest effect sizes. For illustrative purposes only, Figure 6.3 offers an heuristic of the pathway to change from receipt of message to ballpark metrics of behavioural impact.

Although metrics of change may be modest, relatively large numbers of individuals can be influenced, but only if the campaign/intervention is of sufficient magnitude. However, achieving this assumes that all working age individuals receive the (well configured) message (and can act upon it). This is rarely a realisable objective.

It is, therefore, important to establish informed and realistic estimates of the number of individuals that the message/campaign will reach and to use the influence-attribution heuristic depicted in Figure 6.3 (or an alternative source based on real data referenced to the issue being considered if it is available) to estimate the likely metric of behavioural impact. This can be a useful heuristic to apply at the options appraisal stage when considering alternative interventions.

The principal limitation of education-based interventions is that information is but one of an array of likely more pervasive influences on behaviour, e.g. habit, social/cultural influences, costs and benefits associated with the 'desirable behaviour' and structural barriers. In the public domain there is modest scope for control over these variables. There is significantly greater scope to influence aspects of these key behaviour-shaping variables in more controlled contexts, such as the workplace (see Section 6.4).

6.4 Indirect interventions – behaviour change via intermediaries

Indirect interventions seek to influence the behaviour of target groups via a surrogate or intermediary. This requires mapping potential intermediaries, referenced to the target population(s), taking account of any segmentation differences, e.g. independent financial advisers are a potentially relevant intermediary, but predominantly only for managerial and professional groups. The most effective intermediaries are likely to be those professions/organisations that people already interact with and, importantly, trust.

Although their sphere of influence is limited to those segments currently in work and the recruitment of new employees, employers potentially play a key role here:

- They constitute a key normative influence in terms of the duration and configuration of work and the duration of working life.
- They have control over key salient influences, e.g. default opted-in schemes for employer pensions and incentives for EWL.
- They enjoy a more positive (relative) trust profile than other sources.
- They embody the potential for delivering a consistent message to individuals of all ages in a measured and programmed manner, which cannot be achieved through broad-based publicity campaigns.
- They embody the potential to expose (propagate) younger employees to normative influences in terms of the working and pension arrangements of older employees.
- **Most importantly**, they offer the potential to take the scope for intervention beyond relatively weak communication elements, extending to aspects that relate to the choice architecture, i.e. variables that nudge desired behaviour on the part of employees and the creation of positive climate that fosters cultural change.
- Metrics of influence are potentially greater than individual focused interventions, i.e. a single successful interaction with an organisation or an employer's group representative resulting in changes to employer practice can result in a significant ripple effect in terms of the number of individuals (employees) that might be influenced.

The use of surrogates to propagate the EWL agenda is likely to represent a prerequisite, in view of evidence of the Department for Work and Pensions' (DWP's) eroded public trust on this issue. However, a primary benefit relates to the metrics of impact and the scope for enlisted surrogates to act as **amplification stations**⁴².

⁴² High salience (to the public) risk communicators/communication sources, including the mass media. See Kasperson, R.E. and Kasperson, J., *The Social Amplification and Attenuation of Risk*. <http://paul-hadrien.info/backup/LSE/IS%20490/The%20social%20amplification%20and%20attenuation%20of%20risk.pdf>

A key component here, however, clearly, relates to the potential for these intermediaries to be persuaded/motivated to engage with the EWL agenda and its propagation. It is likely that further empirical work is needed to establish the scope for this and what would motivate engagement most acutely amongst employers.

6.4.1 The scope for intervention via employers

Beyond legislative change and amendments to employment law, the scope for intervention with employers potentially equates to:

- gaining support for (sign-up) and adoption of good practice principles (to be defined) in employer promotion of EWL (employee retention and recruitment);
- using employers as **amplification stations** – a conduit to transmit key messages to employees on EWL and pensions.

Building on established partnership/stakeholder activity with employers, e.g. aspects of the Age Positive initiative (2006) and Extending Working Life Sector initiative (2010-2011), potential approaches to engaging with employers include:

- **national** – high level engagement with large employers; employer interest groups and professional associations – possibly under the auspices of Corporate Social Responsibility;
- **sectors** – working with key employment sector interest groups (including professional associations and workers' representatives). There is scope for a strategic, targeted approach here, informed by insights from work on segmentation (see Section B.3);
- **local** – regionally based direct engagement with employers (principally small and medium sized enterprises (SMEs)), making use of established communication networks and channels, such as local business enterprise groups and associations; and the Chamber of Commerce. Complementary strategies might include road-show type events.

As with interventions aimed at individuals, those aimed at employers require careful planning of content and delivery pathways.

Intervention content

- A prerequisite is a clear and empirically evidenced understanding of variables that impact on employer preparedness/barriers to engage with EWL – including demographic differences, e.g. by sector, size of employing organisation.
- The development of a clear and agreed (with employers and other stakeholders) criteria regarding the vision of **good practice** in promoting and managing EWL.
- The generation of empirically informed practical guidance material aimed at employers detailing how to operationalise good EWL practice – principles, systems and structures.
- Tools for employers – e.g. appropriately configured information and advice material that permit employees to make informed choices and monitor their performance, etc.

Intervention delivery

- Mapping the scope for employer engagement opportunities, particularly through established structures, groupings and associations – at national, regional, local and sector levels, taking account of differences by size of organisation.

- Using segmentation evidence to highlight key sectors for intense focus, i.e. identifying sectors that are more amenable to adopt good EWL practice and where the employee demographic profiles reflect concentrations of the **receptive middle** (see Section B.3).
- Examining the scope for forming/enhancing linkages between employers and other EWL relevant stakeholders e.g. pensions advisers, trades unions.

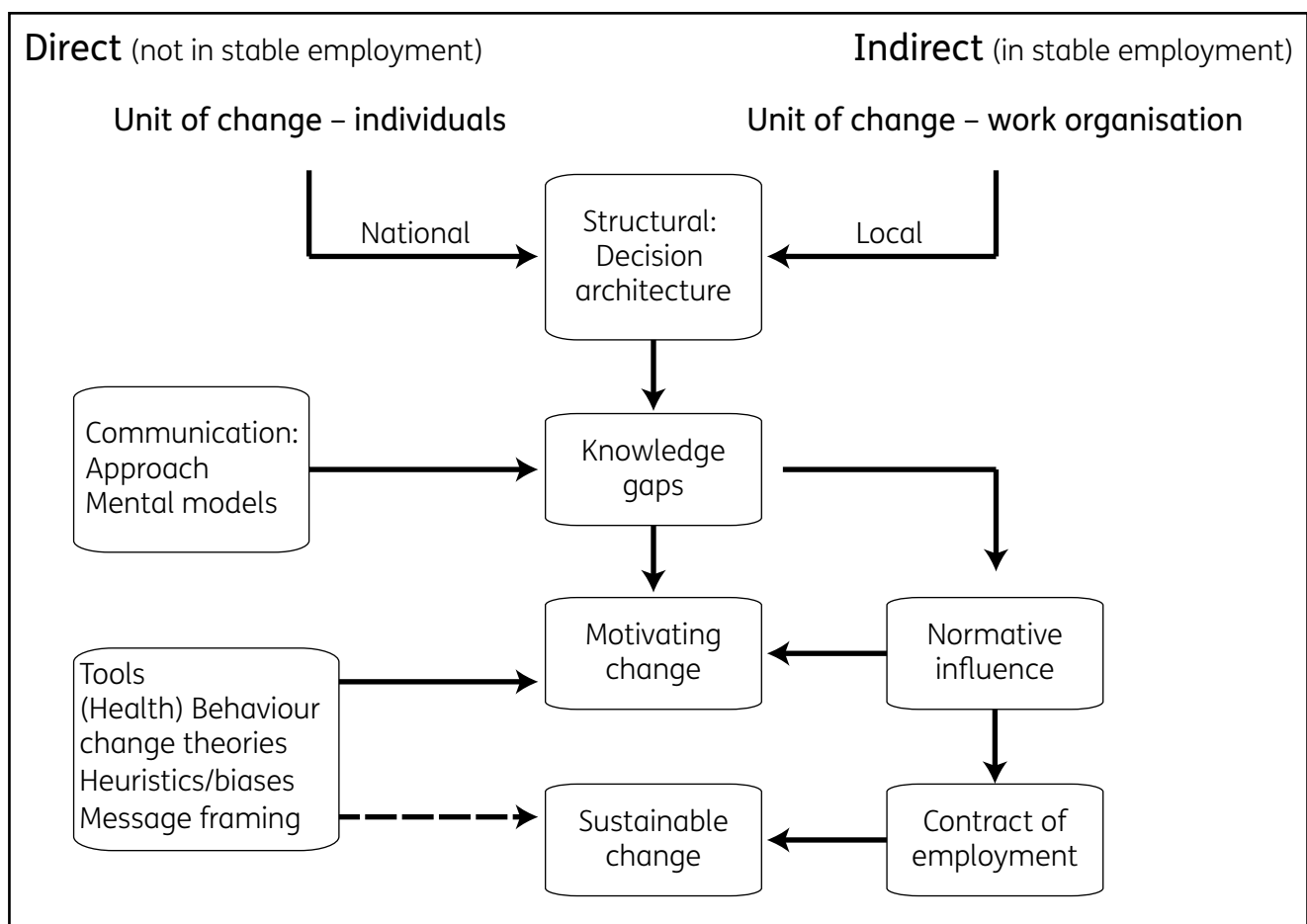
6.5 The need for a multifaceted approach

Much has been made here of the opportunities for influencing behaviour via employers. However, it is clear that the employer route only offers a partial solution, in so far as the scope for impact is limited to those in stable employment and, likely to a more modest degree, with regard to employer recruitment policy for older people.

For those individuals currently not in paid work or who do not enjoy regular stable employment, the scope for intervention is restricted to more traditional broad-based information and awareness campaigns, possibly supplemented by more targeted interventions that focus on regional/local high-priority/high-risk populations (see Section B.3).

We would suggest that an embracing approach to EWL requires a combination of interventions, aimed at both influencing individuals directly and via the configuration of the decision architecture, in particular interventions that impact on employers' decision architecture. The scope for each varies between different social groups, a primary determinant here resting with the relationship to stable employment (see Figure 6.4).

Figure 6.4 A multi-faceted multi-layered approach to intervention



7 The scope for evaluation

In this chapter we consider the scope and options for evaluation, referenced to our recommendations on intervention, detailed in earlier sections of the report.

7.1 Communication interventions

7.1.1 Message content

In terms of defining the content of communication material, we recommend that the mental models approach offers a useful perspective. The premise here is that there is scope for enhancing the impact of communication material where its content builds on the prior understandings and orientations of target audiences – referenced to expert perspectives.

Communication message content would be primarily referenced to this empirical platform and orientated around filling knowledge gaps and addressing misunderstandings. Arising communication material could be configured to take advantage of contemporary insights, notably those arising from ‘health’ behaviour change models, message framing and the wealth of established guidelines on good practice in risk communication (see, for example, Covello *et al.*, 2004).

A simple before and after evaluation design with a modest sample of representatives of target group(s) would permit the testing of the extent to which respondent understanding is enhanced following exposure to generated communication material. Control trials could also be configured, but we would suggest that the cost would be disproportionate to the net gain. Of greater intrinsic value here is the potential to learn from arising evidence, through iterative trialling of alternative content/format and between samples representing different target audiences to assess different knowledge needs and the relative impact on understanding.

Beyond contributions to knowledge and understanding are elements that relate to the motivational impact of alternative configurations of messages. The underpinning science here is quite well established. Hence, we would recommend that the issue is more one of configuring communication material content to take advantage of these insights (see above), rather than seeking to formally test effects. For example, it has been possible to identify an array of salient gain and loss frames from the established review evidence (see Table 4.1 and Section B.1.12).

While it would be possible to quantitatively evaluate the impact of alternative message configurations, this would require recourse to large samples. In view of the likelihood of small effect sizes, combined with the fact that the arising data would be limited to behaviour intention (essentially attitude), we believe that the investment costs would outweigh the net benefit.

7.1.2 Transmitting messages

As discussed in Section 3.2 (and in detail in Section B.8) a core finding with regard to the transmission of messages on extending working life (EWL) is that the Department for Work and Pensions’ (DWP’s) trust profile is low. We believe that the scope for enhancing this is equally low, due to the public’s entrenched negative perception that the EWL policy issue is closely aligned with political agendas, which also tend to be mistrusted. This effectively necessitates the continued use of intermediaries or surrogates as the primary transmission routes. This might, for example, be achieved through the DWP building upon its established employer engagement links and activity.

Delivery via intermediaries adds an additional layer of complexity to both the intervention and evaluation process, i.e. the evaluation package relates not just to the impact on target individuals/groups but the pathway to facilitating this via intermediaries. Having mapped potential surrogates, and discovered more about what it would take to gain their engagement with the DWP's EWL agenda, there is a need to configure interventions that will propagate the 'sign-up' of relevant organisations (particularly employers), groups and professions to play this role.

The implications for impact evaluation relate to rates of 'sign-up' of intermediaries and tracking the percolation of impact on individuals/target groups. It should be possible to generate substantially accurate estimates of the number of relevant organisations/professional bodies and practitioners and forecast rates of contact/estimates of successful **sign-up** over time. This would permit a quantitative evaluation of penetration. There will also be a need to gather (principally qualitative) feedback/intervention progress monitoring evidence.

There is also scope for a case-control approach to evaluation here, comparing the impact of policy activity aimed at different surrogates and the impact of different surrogates on reaching members of target groups, plausibly extending to a demonstration of the counterfactual.

7.2 Decision architecture interventions – nudges

While it is possible to construe manipulations of the decision architecture as communication interventions, they are perhaps more appropriately cast as relating to the decision-making climate (**decision architecture** – Thaler and Sunstein, 2008).

In part, the intent of prevailing tax and benefit arrangements and employer practices can be to **communicate** and motivate people to behave in **preferred** ways. But they can also have unintended consequences, either because they are configured in ways that engender perverse motivations or simply because the public are unaware of them, or draw inappropriate inferences. There is a need to evaluate not only the impact of new and established **nudges** designed to engender desired behaviour within target groups, but also to gather evidence of the consequences of 'unhelpful' nudges, with a view to finding ways to redress these.

In the context of EWL and pensions there are two primary influences on the decision architecture: the State (tax/benefit systems and employment law) and employers (terms, conditions, recruitment and retention practices and normative references). Each is potentially malleable and impracticable in terms of policy intervention and change.

7.2.1 Fiscal and fiduciary arrangements

Baseline evidence on the recently announced State-controlled 2012 automatic enrolment pension scheme appears to be established, in so far as work has been undertaken to test public reactions (DWP, 2009; Pensions Policy Institute (PPI), 2009) and the evaluation of opt-out rates is, intuitively, relatively straightforward to operationalise.

With regard to other, longer established elements of the decision architecture, notably within the tax and benefit system (including substantively inaccurate public beliefs and inferences), on the basis of the review evidence, it is possible to identify an array of positive and negative effects. However, there is very little quantitative evidence of identified effects, so it is difficult to ascertain how widespread their influence might be. There is scope to evaluate and establish this through a modest amount of supplementary qualitative work as well as quantification based on a representative sample.

We would recommend that the approach to discovering this should be aligned with the mental models perspective detailed in Section 3.3.1, as the point of interest rests with not just the rational/objective influence of the established decision architecture but, more pertinently, with the nudges that owe more to people's beliefs and inferences.

Having established a comprehensive picture of salient influences, it would be possible to evaluate current and alternative-future configurations of the decision architecture. Effects could be demonstrated under experimentally controlled trial conditions, or through large-scale social surveys, and decision-preferences reported. As elsewhere, a limitation is that choices in the domain of alternative-futures would be limited to measures of behavioural intention. While this would serve as a limit to forecasts of arising metrics of behaviour change, reliable data could be derived regarding the relative merits of alternative configurations.

7.2.2 Employers

The key role played by employing organisations on employee culture, in terms of norms values, attitudes belief and practices, is well established. Potentially influenceable nudges in this arena relate to formal systems and procedures, e.g. retirement policies, pension arrangements, etc., as well as more subtle cultural elements, e.g. corporate priorities, leadership style, managerial commitment, trust and critically, from the perspective of behavioural change, employee interpretations of these (again, accurate and inaccurate).

The review evidence, although modest on this issue, suggests that contemporary employer generated configurations of the EWL and pension decision architecture embodies an array of 'helpful' and 'unhelpful' nudges. This area appears to be under-researched/evidenced.

Commissioned research is needed to characterise employers' established arrangements and map any segment differences by employment sector, size of organisation, etc. This could usefully build on established employer survey evidence (Metcalf and Meadows, 2006 and 2010). Necessarily, this should aim to capture employer policies and practices, through engagement with employers and employees. Engagement with employees is necessary in order to capture key elements relating to employee beliefs and inferences. As elsewhere, we would recommend a mental models approach to achieve this.

There is scope to examine the potential impact of alternative configurations of the decision architecture on employee orientations and behaviour intentions. Effects could be demonstrated under experimentally controlled trial conditions, or through large-scale surveys and decision-preferences reported.

Evidence here could take the form of qualitative and/or quantitative investigation. However, if forecasts of the impact of current, or alternative, future arrangements is sought, this evidence will need to be based upon representative samples, via a stratified survey.

The above relates to gathering evidence on the impact of contemporary and alternative employer practice. In evidence terms, it informs public policy understanding over the agenda for change, i.e. what needs to change in terms of employer practices (decision architecture) to have a positive impact on employee EWL/pension investment culture and behaviour.

Having established a model(s) of good practice (see Section 6.4.1) the focus for intervention rests with propagating the adoption of this voluntary code among employers. As elsewhere, it is unlikely that a one-size-fits-all approach will represent a solution on this issue. Rather, it is foreseeable that a range of complementary approaches will be needed, not least to take account of differences between employment sectors and different sizes of organisation.

Complementary options might plausibly be aligned with the established corporate social responsibility agenda, linkages to industry quality standards in the ISO 9000 framework, roadshow events⁴³ to engage SMEs in the production of guidance information (web-based or hardcopy, e.g. via mailshots), line-management training, and more.

Interventions of this type require evaluation in terms of their:

- 1 effectiveness in meeting employer information needs;
- 2 take-up/penetration rates on targeted employers;
- 3 impact on employer orientations and practices;
- 4 impact on employee EWL/pensions behaviour.

In view of its likely iterative nature, the first is probably most appropriately assessed through qualitative evaluation.

The second would depend upon the nature of the intervention, but potential options include numbers of promotion events/activities and employer attendance rates, numbers of businesses signing up to a good practice charter (or similar); website 'hits', etc.

The third has potential to be directly linked to promotional activity, through follow-up assessments of businesses that had attended events; signed up to the promulgated good practice charter or visits relevant websites, etc. There is also scope for gathering pre- and post-intervention (and on-going monitoring) data. Data could also be gathered from a random sample of employers. However, there would need to be high confidence that the level of resource allocated to the intervention was sufficient to generate sufficient change for this to be detectable from a large random sample of employers. A more circumspect objective would be to gather evaluation evidence that demonstrates that change can be engendered, through pilot studies, so that the policy objective then becomes focused on delivery rather than demonstrating its impact per se.

A salient issue in evaluating the impact on employer practices relates to the reliability of the evidence gathered. While it is possible to gather evidence from employers, ultimately the policy interest rests with the extent to which any change is apparent to employees. There are sound arguments for seeking evidence of impact on employer practices from employees, rather than, or in addition to, that elicited from their employers. It would also be possible to gather this type of reflective evidence from employees through questions embedded in established UK social surveys.

The fourth essentially relates to the last step in the intervention logic chain. Specifically, there is a need to establish the impact of changes in employer practices on employee EWL and pension investment behaviour. A notable challenge to establishing causality here is the delay between the commencement of the intervention and manifest behavioural consequences, which are likely to exhibit notable lag effects, particularly in the case of EWL. An option here might be to gather evidence through further follow-up studies of organisations that represent known contacts, established through the types of activity detailed at points 2 and 3 above. However, there are limitations here:

- difficulties are likely to be encountered in gathering baseline data;
- a simple **before** and **after** design, even if achievable, would make it difficult to take account of any intervening variables;

⁴³ See, for example, *Successful interventions with hard to reach groups* <http://www.hse.gov.uk/research/misc/hardtoreach.pdf>

- policy intervention of this nature essentially relates to supporting employers in configuring and promoting their own interventions. It is difficult to control for the quality of employer interventions, i.e. interventions can fail due to being poorly conceived **and** due to shortcomings in their delivery (see review of evidence in Appendix B);
- the self-selectivity of the sample would raise questions over its representativeness. However, arising evidence could plausibly be used to exemplify good practice.

Policy activity focused on defining good practice and/or working with a small sample of employers to develop workable solutions may be beneficial. Once demonstrated this could usefully form the basis of more detailed guidance on good practice in configuring a positive EWL/pensions decision architecture. The configuration of pilot studies involving a relatively small sample of employers aligned with the process depicted in Figure 6.2 offers the opportunity to gather a comprehensive array of qualitative and quantitative evaluation evidence focused on the impact on employee intention and behaviour.

8 Conclusions

There are significant challenges to finding ways to encourage people to extend their working lives and make effective financial provision for retirement. The main barriers surround the sense of loss and social injustice associated with unpopular rises in State Pension age (SPA) and reduced (actual and perceived) pension entitlements.

However, beyond this there is evidence that a significant proportion of individuals would be positively disposed to extend their working lives, typically by a year or two, if work was configured in an attractive fashion, principally part-time and/or flexible. There is also scope for policy initiatives that impact upon cultural norms in the workplace, so that working later in life becomes part of the natural order of things.

8.1 Different publics

An array of social differences has been detected regarding people's orientation to extending working life (EWL) and disposition/ability to invest in pensions. Some of these differences relate to personal characteristics, however more saliently from the perspective of public policy intervention, there appear to be differences by social status. In broad terms, cultural disposition to EWL diminishes as we move down the social hierarchy. This has been attributed to a range of social and structural criteria, but is most likely to be underpinned by aspects relating to levels of intrinsic satisfaction derived from work and employment opportunities, not least opportunities for part-time and flexible working arrangements.

Primary implications of the above surround the need for different intervention strategies for different social groups, in particular between those in stable employment, irregular employment and the unemployed, and the need to find ways to maximise the opportunities for EWL amongst those more disposed to consider and act upon the proposition.

It would seem reasonable to regard professionals and senior managerial grades as essentially **fixed**, in so far as members of these groups tend to be the most culturally engaged with work, benefit from more employment opportunities and have modest financial need to EWL. At the other end of the social spectrum are the semi- and unskilled. Much has been made in the literature of this group's modest cultural engagement with work in later life. However, there are a number of important structural and institutional influences that disproportionately limit the scope for EWL amongst members of this group. Notable barriers relate to: restricted skill set, access to stable employment, availability of flexible employment and opportunities for intrinsically rewarding 'good jobs'. Between these extremes lie the social strata that we have characterised as 'the receptive middle'. Although a broad church, members of this group are likely to: possess marketable skills, enjoy (relatively) stable employment, be in the types of occupations where there are more opportunities for flexible working and have modest financial provision for retirement, but view additions to this as a gain. For these reasons it is suggested that realisable intervention impact rates are likely to be higher for this group.

By extension, there may be a case for apportioning resources to take advantage of the potentially higher metrics of impact. In no sense should this be interpreted as an avocation for abandoning attempts to influence less receptive groups. Rather, it is advanced in the interest of strategic consideration of relative resource allocation and realisable net social gain. Establishing change within the receptive middle also embodies potential to impact on retirement norms in other social groups over the longer term.

8.2 Communication interventions

It is clear that there is widespread confusion among large swathes of the public over even basic elements such as SPA. More saliently, relatively few individuals are motivated or feel able to engage with the complexities of either choosing a pension, or calculating their retirement income. The scope for education initiatives aimed at enhancing financial literacy to redress this is modest, given the low levels of confidence/motivation to engage with the detail.

For most people decision-making in this domain is based on vague and impressionistic understandings, oriented around some very basic beliefs and heuristics, e.g. *'you need to save for retirement'*, *'pensions are a good idea'*, *'it's not worth working [post SPA] as I will lose it all in tax'*, etc. Communication interventions need to focus on addressing these headline beliefs, reinforcing those that are substantively accurate and addressing gaps and misconceptions. We have suggested that the mental models approach to communication offers a tried and tested framework for gathering intelligence on message content and configuring effective material focused on meeting the informational needs of target groups.

A significant challenge to effective communication surrounds the low public trust profile of the Department for Work and Pensions (DWP) in respect of the EWL agenda. As noted elsewhere, it is unlikely that attempts to enhance this would be successful, due to the notable public disquiet over recently announced changes to SPA and a strong sense of vested interest on the part of g/ Government. More fundamentally, it is apparent most individuals do not actively seek information on EWL. In view of this, the use of surrogates, e.g. employers, professional bodies, community groups, finance professionals, to actively propagate key messages would appear to be a prerequisite. The DWP's Extending Working Life Sector Initiative (2010/11), involving work with specific sector leads, is an example of this.

To date, the EWL and pension behaviour change policy agendas appear to have been dominated by a public health model of intervention, i.e. a focus on the individual as the unit of change. This is appropriate but, we would suggest, partial in so far as it embodies the following assumptions:

- individuals are actively engaged with making rational decisions over these issues (**most are not**);
- change is vested within the gift of individuals (**there are both push and pull influences**);
- the primary point of resistance to EWL rests with individuals (**potentially underplays structural and institutional effects**);
- cultural change arises from the sum of individual actions (**underplays structural and institutional norming influences**).

The evidence is that individuals tend not to be information seeking or actively engaged in planning in this area, rather they are more disposed to react to events and opportunities as they unfold. This suggests that they are susceptible to an array of nudges, some of which may motivate early withdrawal from the labour force, while others may encourage EWL.

8.3 Decision architecture interventions

The nudge concept, as advanced by Thaler and Sunstein (2008), is quite distinct from (but not incompatible with) the (health) behaviour change approach, in so far as while drawing heavily on cognitive psychology insights, it extends beyond this to structural arrangements, emphasising the role of the decision architecture, i.e. it advocates a focus on policy interventions that make changes to the context in which individuals make decisions, – so that they make better decisions – rather

than attempting to change how individuals feel about/react to contexts, e.g. automatic enrolment in pensions, rather than stressing the pitfalls of failing to invest in a pension. Other examples include the removal of the default retirement age and raising the age at which individuals are entitled to receive their State Pension.

A comprehensive intervention strategy should necessarily embody elements of both an individual and a decision architecture focus. The latter perspective appears to be under-exploited in the current policy perspective on EWL, in particular with respect to the role played by employers and the scope for influencing this to foster and reinforce a positive, decision architecture for employees.

Broadening the perspective on behaviour change to one of cultural change and using the workplace as a dynamo to feed this would represent something of a paradigm shift in the EWL policy perspective, from the individual to the context, but one that can be predicted to yield higher returns than a focus on individuals alone. Such a shift in emphasis would require an extension of the boundaries of intervention options beyond (relatively weak in terms of behavioural impact) media-based communication output to one of stakeholder engagement and relationship building.

The scope for partnership-working interventions with employers is twofold:

- for employers to act as a conduit/amplification station for transmitting EWL messages to employees;
- to propagate the adoption of good EWL practice in human resource management.

Such a strategy would require foundation work with stakeholders to define and agree a voluntary code of **good employer practice**. The scope for aligning/embedding this with established activity within the Corporate Social Responsibility and Investors in People agendas should be explored. This would need to be underpinned by research into current human resource practice and what would/would not motivate employers to adopt the to-be-defined good practice.

The promotion of good practice might be propagated through partnership working with employer associations, professional bodies, employee representatives and third sector organisations. It is foreseeable that support to employers will need to be tailored to meet the respective needs of large, medium and small enterprises. There would be a need for stakeholder engagement/research to establish this.

Little (beyond the headline data provided by Metcalf and Matthews, 2006) appears to be known about contemporary employer practices; in particular the array and prevalence of established nudges that influence employee retirement behaviour and the extent which these encourage or discourage EWL. There is a need for research to establish this.

Turning to elements of the decision architecture that lie beyond the employer, intuitively there is scope to configure tax, benefit and other fiscal arrangements in ways that motivate behaviour change. However, again we would recommend that any proposed change in incentives or disincentives should be tested on the public(s) to see how they impact on their mental models and arising decisions. As Thaler and Sunstein highlight, it would be unwise to make assumptions over the extent to which such nudges might inspire rational choices. On the basis of the available evidence, we would suggest that nudges of this type would need to be highly intuitive and simply configured headlines such as *‘a tax holiday for working for two more years’*, or *‘a lump sum after three extra years’*, or *‘emphasising the loss of income from early retirement’* rather than being buried in the detail of fiscal arrangements.

8.4 Summary

We believe that the adoption of a mental models approach offers a useful technique to generate intelligence to inform the content of communication material. The configuration of the content of any materials produced should also be aligned with established good-practice guidance, including insights from the various psychology (health) behaviour change approaches, message framing effects and similar. It is foreseeable that there will be added value from tailoring the material produced to fit with the mental models and informational needs of different target audiences.

There are potential advantages from identifying and enlisting the co-operation of more-trusted surrogates to transmit any communication material produced. This would require the engagement of stakeholders, notably employers, employer's associations, professional bodies, community groups etc. Employers should be considered a primary route due to their stronger relative trust profile, compared with other sources. There is a need to find ways to motivate surrogates to operate as active (promoting) rather than a passive repositories of EWL/pensions information.

The focus on individuals as the primary target for intervention activity should be broadened/ complemented by a focus on employers and their EWL practices. Organisational climate has a significant normative influence on the behaviour of employees. Employers are well placed to table options that nudge people to make decisions about EWL and pensions, i.e. work organisations play an important role in configuring the decision architecture. A key precursor to configuring interventions with employers would be establishing a model of EWL good practice and discovering the nudges that would motivate its adoption by employers.

The receptive middle should be considered a priority group for intervention, for the reasons outlined earlier in this report. Options for engagement with members of this group include targeted mail-shots by locale, reference to media consumption profiles and similar, but most saliently via their employer. In terms of metrics of influence, there are potential advantages from focusing on sectors in which the receptive middle over-represents e.g. health and social care, education; finance and real estate activity.

Appendix A

Evidence gathering, performance and impact evaluation

The following is not offered as a comprehensive commentary on the scope for policy development and delivery evaluation, as detailed guidance on this is provided within HM Treasury guidance (2009a; 2009b), and elsewhere. Rather, this section aims to consider the options and scope for evaluation of foreseeable interventions within the extending working life (EWL)/pensions domain.

A.1 The role of evaluation evidence

The purpose of policy evaluation has been variously described, but is perhaps most succinctly captured as ‘... *to systematically investigate the effectiveness of social interventions* ...’ (Rossi *et al.*, 2004). Evaluation is the cornerstone of an evidence-based approach. Moreover, the contemporary perspective is that evaluation needs to be an integral part of the policy process, from initial identification of priorities, through options appraisal to the assessment of delivery and impact (see Figure 16). Evaluation is very much **not** a post-hoc process.

When considering evaluation, it is tempting to focus on outcomes (impact). This is important; however the need for a scientifically informed and robust approach to the selection of intervention options and careful planning of the delivery process with feedback on performance cannot be overstressed. If these elements are not based on sound evidence a positive **outcome** in terms of impact would, indeed, be a fortunate result.

The role of evaluation relates not just to impact, but is more appropriately construed as an iterative, interactive process based on learning from evidence, rather than a linear process focused on outcomes alone (refer to Figure A.2).

Key questions for evaluation that must be considered at the intervention planning stage surround:

- How complete are our understandings of the influence model(s)?
- Are our assumptions about the world valid?
- Can we benchmark?
- Can we monitor our progress?
- Can we measure the impact?
- Can we attribute the impact to what we have done?
- Can we demonstrate the counterfactual?

A.2 The scope for benchmarking

The review (detailed in Appendix B) revealed a rich body of evidence on attitudes and behaviour in relation to EWL and pensions. The principal limitations of this are:

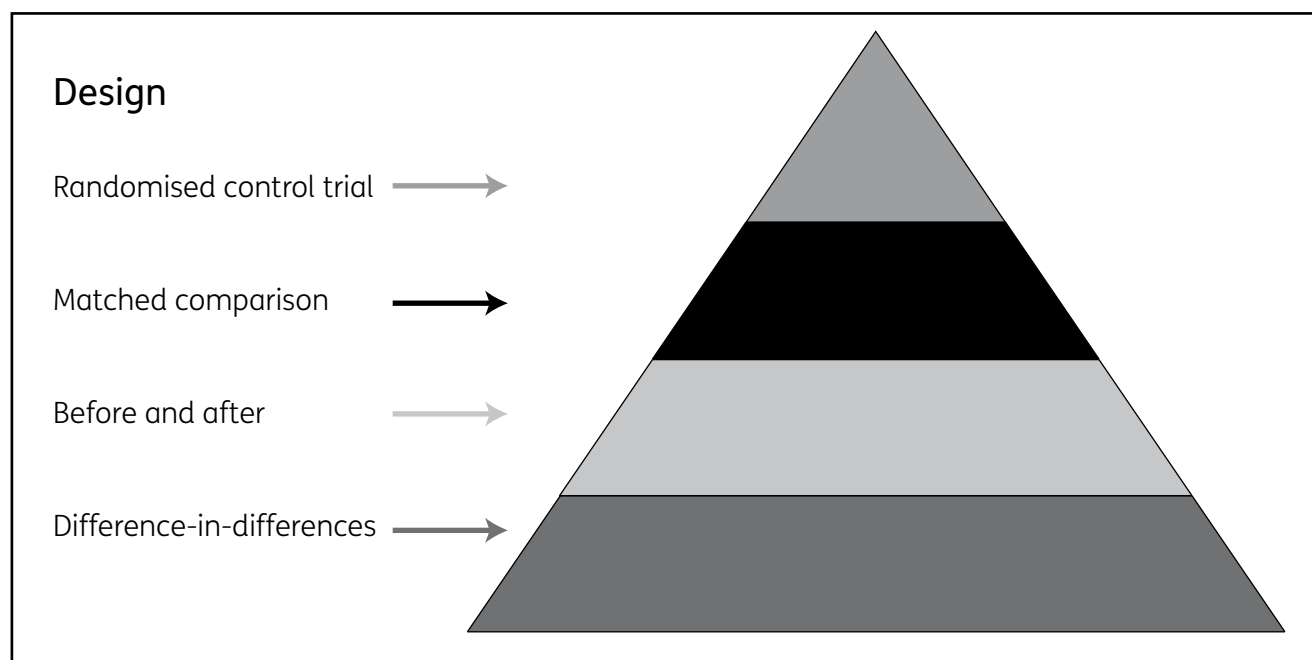
- The amassed evidence reveals more on ‘what people believe’ than ‘why they believe what they believe’, the latter is more important and enlightening from the perspective of configuring behaviour and cultural change interventions.
- A public health individual focused perspective predominates, the net result of which is that there is very little evidence regarding the scope for indirect influence through intermediaries, e.g. employers, or aspects that address the decision architecture. This represents a substantial gap in the evidence base.
- National survey evidence, e.g. the Attitudes to Pensions Survey and elements of Labour Force Survey, above and beyond statistics on age of employees at the point of retirement, is largely restricted to behaviour-intention, e.g. numbers of individuals who claim they intend to extend working life, estimates of preferred/likely retirement age, and so on. There is scope to monitor changes in such orientations and intentions over time, and infer some degree of behavioural impact. However, any conclusions will necessarily be limited to relative change and based on inference rather than any absolute measure of the impact on behaviour.
- National survey data sets are also potentially problematic as measures of intervention success, in so far as they offer no capacity for controlling for intervening variables or demonstrating causality. At best they offer the potential for complementary evidence of change pre- and post-intervention.
- There is a risk that national survey data sets will be insufficiently sensitive to detect change attributable to the intervention or, to put it another way, there needs to be high confidence that the configured intervention(s) will produce sufficient change in target groups to be detected through reference to these relatively blunt instruments. An undesirable outcome would be a type 1 error, i.e. the intervention was intrinsically sound, a positive effect was present, but could not be demonstrated simply because insufficient numbers were influenced.

In most cases, it will be desirable to configure bespoke benchmark measures that are aligned with and well focused on the configured intervention(s). A significant challenge, however, relates to the lag between initiation and any impact on behaviour. This is of particular salience in the current instance, where it may take 20, 30 or 40 years to be certain of the impact on length of working life.

A.3 Impact assessment (summative evaluation)

Given the long-run perspective of the EWL and pension issues, the scope for measuring policy impact on outcomes, in particular EWL, is very limited in the short-term. However, assuming that a set of credible change pathways can be configured, it would be possible to assess impact in terms of progress to achieving the constituent steps (progress) within each.

Options for impact assessment need to be considered with reference to the hierarchy of evidence (HM Treasury, 2009a; Figure A.1) and, critically, in terms of what is to be claimed on the basis of the information gathered. Randomised control trials are generally regarded as representing the only truly experimental model for assessment, all others being considered quasi-experimental.

Figure A.1 Evidence hierarchy

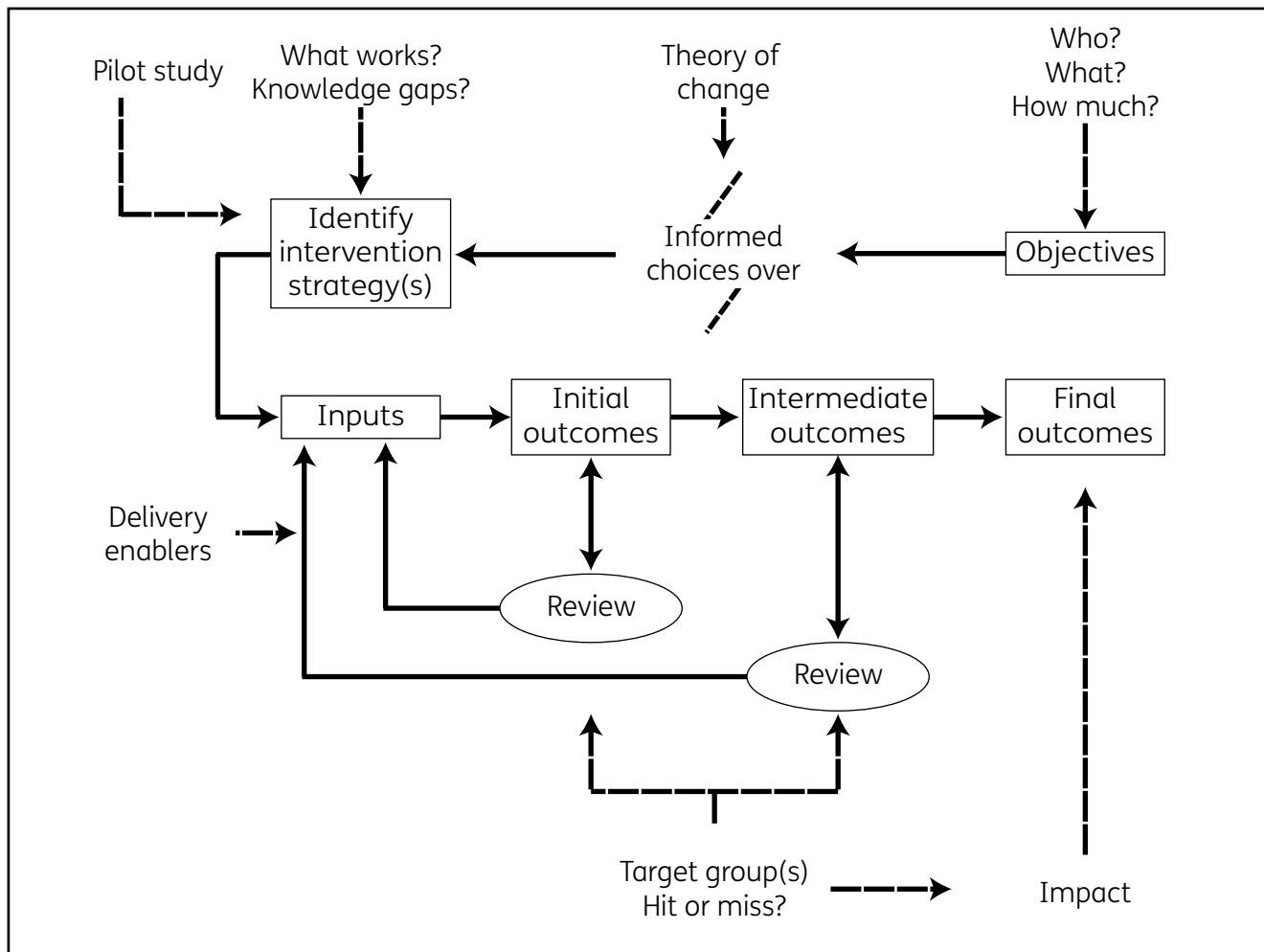
However, it is necessary to achieve a balance between the scientific aspiration, the logistics of the policy delivery process and associated costs and benefits. In most (all?) instances solutions require a pragmatic approach.

Testing the impact of different configurations of communication material, alternative configurations of the decision architecture (nudges), and similar, lend themselves to randomised control trial or matched sample evaluation, extending to formal testing of the counterfactual. Logistically, opportunities for this are greatest when evaluating pilot interventions, or localised/regional initiatives, in the context of establishing ‘what works’, i.e. prior to any planned wider roll-out. Once at the stage of roll-out, the idea of a comparison control group makes less sense in terms of the realisation of policy objectives, not least because it raises significant logistical difficulties and ethical implications.

Further issues that need to be considered relate to the focus for impact. The bottom line in respect of the current intent relates to the impact on individuals and their retirement/pensions behaviour. However, this is quite a blunt measure, with notable logistical barriers to establishing robust causal linkages with policy activity. Moreover, there is a high risk that the intervention impact may be ‘flooded’ by other factors, e.g. cyclical changes in the demand for labour. Careful mapping of the intervention logic and necessary metrics of change to achieve objectives offers significant scope for the identification of intermediate impacts, e.g. proportions of individuals in target groups who have received communication material; proportion of individuals who exhibit good/enhanced knowledge of key decision criteria; numbers/proportions of employers that have adopted good EWL practice.

A.4 Performance monitoring (formative evaluation)

It is essential to keep in mind that evaluation is not the end point of the process; it is an essential ingredient of an evidence-based approach. It embodies configuring a package of evidence gathering that is tailored to meet the needs of the intervention. Typically, a combination of qualitative and quantitative evidence is required to test our assumptions, and inform decisions over any need to refocus where these are found to be partial, erroneous or otherwise flawed. The core elements of this process are characterised in Figure A.2.

Figure A.2 The evaluation cycle

A widely encountered weakness of policy interventions is that they are under-evidenced: data-poor, rather than data-rich, under-informed, rather than informed, i.e. they have insufficient **feedback-loops** to provide an early indication of problematic elements.

It is also critical to keep in mind that potential **problems** do not just relate to assumptions that we may have made about the target audience(s) and the behaviour change model that we have selected, but also to **making it happen**, i.e. the implementation process.

It is almost certainly the case that many intrinsically sound interventions, in terms of the scientific properties of their theory of change, have floundered due to failures in the delivery process, e.g. due to insufficient training of relevant policy delivery staff; poor relationships between interdependent functions/groups within the delivery chain. For example, it is not uncommon to come across front-line policy staff with little insight into the aims and rationale of the intervention they are playing a key role in delivering. Gathering relatively low cost qualitative evidence (typically interviews or group elicitations with representatives of key functions) to tap embedded knowledge and provide essential feedback on the intervention logic and delivery performance can serve as a bulwark to counter this.

For reasons of illustrating the points made we have mirrored the approach of a number of other authors in portraying a distinction between impact and performance evaluation. However, within the context of application, we would view this as an artificial and undesirable distinction. Rather, each should necessarily represent complementary facets of a unified process (see Chen, 1990; Owen and Rodgers, 1999; Judge and Bauld, 2001).

Appendix B

Improving communications about extending working life amongst individuals: learning from models of behavioural and attitudinal change

Review of evidence related to key policy issues

B.1 Summary of main findings

B.1.1 How do the public view extending working life (EWL) beyond perceived age of retirement?

- Widespread recognition of the logic of the need to finance increased longevity through extending working life does not translate into a belief that *'I should extend my working life'*.
- The option for pre-State Retirement age (SPA) retirement is a highly valued and widely encountered aspiration.
- Being able to choose how to spend your time, rather than having this determined by work seems to be a key incentive to retire.
- There seems to be significant demand for post-SPA employment where this is a voluntary decision embodying choice, particularly over hours of work.
- Most who would consider working post-SPA want to remain with their current employer.
- Most who would consider working post-SPA want part-time employment, but believe that there are insufficient opportunities for this without downshifting.
- The demand for downshifting (less responsibility/lower skilled work) is low.
- Different social groups have different attitudes and intentions regarding extending working life (EWL).

B.1.2 To what extent does decision-making over retirement and pensions reflect the presence of cognitive biases, heuristic reasoning or affective reactions?

- Widespread concern over post-SPA income does not seem to motivate engagement with planning or increase the attractiveness of EWL.
- EWL is framed as a loss, in terms of leisure time and active life years, which is not outweighed by financial gains from enhanced income.
- Large numbers claim to be amenable to the idea of EWL so long as this is not a forced option and they have flexibility over hours worked.
- Choice, flexibility and control over the need to work, type and hours of work are highly valued, but unevenly distributed and unevenly realisable between social groups.
- EWL is not salient to most people. There are few precedents in the workplace and many do not see it as an option open to them.
- The concept of phased retirement is unfamiliar to most. However, there seems to be significant attraction to the idea.
- Employers constitute a more important normative influence over how and when to retire than other social references, e.g. family, community.
- The rise in SPA adds to perceptions of uncertainty over provision for retirement – and may feed disposition to retreat from planning.
- The rise in SPA challenges public conceptions of fairness and social equity – and serves as a barrier to engagement with the EWL agenda.
- Widespread recognition of increased longevity does little to diminish individual dread perceptions regarding ill-health/an early death.

- Detailed understanding of tax and pensions is very limited, and, at best, considered vague and impressionistic. Education initiatives are unlikely to have a major impact on this.
- People are positive towards the concept of pensions – but confidence in realisable pension values is seriously eroded.
- Evidence of predominantly vague and impressionistic understandings of pensions and the tax system raises questions over the utility of using incentives, e.g. tax relief, to stimulate pension investment.

B.1.3 How much do people actively engage in decision-making over EWL and pensions?

- Active engagement in decision-making over pensions tends to be a minority activity.
- A significant proportion would prefer to select default options, e.g. joining their employer's pension scheme, rather than selecting an alternative.
- The complexity of pension options and uncertainty over realised values tends to foster inertia.
- Despite almost universal recognition and acceptance of the need to make financial provision for retirement around one-fifth of individuals choose to or have very limited scope to act on this.
- The attitude-behaviour dislocation over pension investment mirrors health and life-style orientations, e.g. while few are unaware of the long-term benefits of smoking cessation, reduced alcohol consumption, dietary change and exercise and often believe these to be desirable, many continue to indulge.
- Financial considerations play a role in decisions over the date of retirement but for many people this is not the only or even the primary criterion.
- Around one-third of individuals prioritise maintaining their current standard of living over their future (retirement) standard of living.
- Around half of individuals feel that they cannot afford to save for retirement.

B.1.4 Which variables impact on decision-making over how and when to retire?

- Key push and pull influences on retirement behaviour, include: Individual (health and psycho-social), financial, family commitments, peer retirement norms, job characteristics (satisfaction, working hours; employer attitudes/norms) and structural influences (availability of work; State benefit arrangements).
- Social differences, relating to social grade/class appear to constitute a primary influence on EWL and pensions behaviour. It has such a strong relationship to having a pension or not; size of pension, employment opportunities, access to flexible work and more.
- Suffering debilitating ill-health is the most salient individual-based determinant of early retirement and disproportionately impacts on the semi-/unskilled.
- Robust evidence of social networks and sub-cultures based on locale constituting strong normative influences on the date of retirement is lacking.

B.1.5 What information needs, knowledge gaps and misunderstandings exist with respect to retirement and pensions?

- Most people react to options for EWL rather than actively seeking them out.
- For the minority who actively seek EWL it is particularly important that they are able to grasp salient facts, and that any misunderstandings are addressed.
- Many people's concept of EWL reflects simple heuristic inference, it is important that these heuristics are appropriate and substantially correct.
- Plugging knowledge gaps is relatively straightforward in communication terms – but the net result is that people are better informed. There is no guarantee that they will make better choices.
- Enhanced knowledge is one of an array of variables impacting on attitudes and behaviour in relation to work. In most instances structural and (workplace) climate influences play a more pervasive role.
- The idea of phased retirement is unfamiliar to many and there is limited understanding of the options or their implications.
- Cultural precedents for EWL are only present in a limited range of employment sectors.
- Flexible working pre- and post-SPA is attractive to many, but people have limited knowledge of the range of potential configurations and how post-SPA income interacts with private/employer/State pensions and other benefits.
- Many people experience difficulty in estimating how much income they will need to support them in retirement, but there is recognition that State Pension values represent a subsistence income.
- People are able to make substantially accurate estimates of State Pension values.
- Levels of awareness and understanding of the financial implications associated with options over early draw-down/deferral of pensions.
- There is fairly strong evidence of a preference for individually tailored, bespoke, pension forecast over generic information.
- The impact of complexity over pensions and EWL: increases the probability of people making poor pension choices; blunts their motivation to actively engage in decision-making; contributes to public uncertainty and a sense of helplessness over planning for later working life and retirement.
- Knowledge of pension matters is low; only one in 20 rates their knowledge as 'good'; and one in four claims to possess little or no knowledge. Confidence in how best to save for pensions is also low (1 in 54 individuals).
- Most people's knowledge of EWL and pensions policies is limited to headline-lines like 'State Pension age is going up', combined with a belief that goal posts are prone to move around in this area.

B.1.6 Orientations to sources of information and advice over EWL, retirement and pensions?

- Trust in stakeholders is typically vague and impressionistic, but referenced to broader inferences regarding perceptions of vested interest.
- Trust is best conceptualised as multi-faceted rather than as a simple invariant 'commodity' or rating that is universally attributed to an organisation, profession or other social group.
- Stakeholder public trust profiles tend not to be uni-dimensional, but interact with the issue under consideration.

- Trust in Government (Ministers) over EWL is low. There are differences in the trust profiles of government (State) departments and agencies, and in the degree of perceived separation from Government, and this is prone to vary with the issue under consideration.
- Stakeholders' trust profile may vary in systematic ways between different social groups, e.g. by social class, gender, ethnicity.
- The recently announced rise in SPA appears to have contributed to the low trust profile of g/Government.
- DWP is a trusted source for information on State Pension values, but is seen as partisan and close to Government on EWL.
- Jobcentre Plus has a poor trust profile.
- Trust in financial institutions appears to be eroded due to high profile examples of pension failure and their role within the current economic crisis.
- Reports of high trust in independent financial advisers seem likely to reflect the absence of bad news and to be based on positive association's with the word 'independent', rather than referenced to direct experience of performance.
- An array of organisations have positive trust profiles, principally third sector organisations, but do not possess intuitive associations with EWL or pensions issues.
- Trust in the concept of pensions appears to be resilient. However, there is low trust (confidence) that pensions will realise hoped for values.

B.1.7 Perspectives on employability, employment options, training and beliefs regarding employer practices and older workers

- Around half of people aged 50+ years express an interest in post-SPA paid work. Most of these people want to work reduced or flexible hours.
- There are social grade differences in disposition to EWL. Those in lower socio-economic groups are least engaged. Job (dis)satisfaction appears to be a causal influence.
- The absence of established precedents in most organisations for post-SPA working inhibits employee/employer discourse on this issue.
- The absence of cultural precedents within many workplaces feeds fears amongst employees that a request for flexible working or reduced hours will be interpreted as a lack of organisational commitment.
- There are fundamental differences between employer and employee objectives regarding flexible working arrangements.
- There is widespread scepticism regarding the availability of attractive, good quality part-time jobs.
- There is speculation that the definition of a good job may vary by age, but there is no substantial empirical evidence on this.
- Care should be taken to avoid over-interpreting older workers' desire for more flexible work, as this is valued by workers of all ages.
- Rates of demand for volitional downshifting amongst people aged 50+ years is offset by a desire for promotion/more responsibility. Most downshifting is involuntary and is more appropriately construed as underemployment.

- Robust evidence of a business case for employing older workers appears to remain elusive. The premise that a robust business case will motivate employers to employ older workers also appears to reflect a leap of faith rather than being grounded in empirical evidence.
- There is a very widespread belief in employer prejudice against employing older workers.
- Anti-age-discrimination legislation regarding the age of retirement tends to be seen as a smoke screen for State Pension savings.
- Age-related training deficits reflect a combination of employer resistance and diminished individual disposition to engage. The evidence on employee (un)willingness to train is inconclusive.
- There is no clear casual linkage between participation in training and EWL.
- Amongst the over 50s seeking work, levels of awareness of and beliefs surrounding the availability of training are low. It also seems that the availability of dedicated courses aimed at the over 50s is low.

B.1.8 Impact of rise in SPA on attitudes to EWL

- The rise in SPA has fuelled widespread sentiments of resentment and challenged established notions of social equity.
- There is said to be a broad-based distrust of changes in Government policy towards older people, i.e. public attitudes to EWL may be influenced by broader perspectives on public policy regarding older people.
- A rise in SPA is a factor in people's decision-making over retirement, but it would be unwise to assume that it is the dominant factor.
- The change in SPA has contributed to established uncertainty and concern over financial arrangements in later life. But it seems unlikely that this will translate into increased motivation to invest in pensions or enhance the willingness to extend working life. It may contribute to rates of withdrawal and disengagement.
- The conclusion that the impact of a rise in SPA on EWL will be greatest on low income groups may be somewhat optimistic, in view of pervasive cultural norms, the incidence of ill-health and employment options.
- A potential barrier to policy delivery on EWL, compared with more opaque policy agendas, is the transparent alignment in the public consciousness with the objectives of Government ministers, of whom there is widespread distrust.
- There is widespread acceptance of the logic of raising SPA, but only modest support (35%) for an enforced rise for all, the majority (52%) disagreeing with this policy.
- The idea of working for a couple of extra years (with choice over how much and for how long) seems to be less problematic in terms of public acceptance, than the inference that this heralds the beginning of a long-term and corrosive agenda on retirement time.
- It is unclear whether the higher expected age of retirement amongst younger respondents reflects a cultural change in retirement orientations or resigned acceptance.

B.1.9 Secondary data analysis

- The average age of retirement is highest amongst the middle income stratum. This stratum exhibits a narrower range of retirement age than the other strata.
- Push and pull influences on pre-SPA retirement impact differently on different social strata/grades.
- Possession of significant pension/asset values appears to serve as an inducement to higher managerial/professional groups to pre-SPA retirement.
- For those on low income, redundancy (implicitly **no choice** or **employer incentivised**) plays a more significant role in pre-SPA retirement than it does for other social grades.
- Middle income groups appear to be less prone (at least to date) to enforced redundancy and are unlikely to possess sufficient pensions and saving assets for these to significantly incentivise pre-SPA withdrawal from work.

B.1.10 Mental models of retirement, pensions and EWL

- There are significant gaps in people's knowledge over key aspects such as the impact of EWL on pensions and other benefits, and they are apt to fall back on simple rules of thumb rather than engaging in a systematic evaluation of options.
- People's beliefs, substantially accurate or otherwise, impact on their behaviour. There is a need to reinforce accurate understandings and tailor messages to address misunderstandings and gaps in knowledge.
- Most people tend to react to EWL options presented to them (or not) rather than actively seeking options.
- Primary orientations to EWL relate to broader attitudinal perspectives.
- Effective communication requires going beyond the technical properties of options (over EWL and pensions) to consider cognitive filters, e.g. trust in stakeholders and affective elements, e.g. challenges to notions of social justice.
- Engaging with public(s) mental models requires consideration of five linked facets: cognitive orientation, emotional orientation, behavioural orientation (intentions), perceptions of stakeholders and structural factors.
- People view retirement as a just and deserved entitlement. Any erosion of this, particularly if it is interpreted as a forced option, is likely to meet with high levels of resistance and, potentially, outrage.
- Retirement is a period of uncertainty, particularly with respect to the spectre of age-related ill-health and worries over the sufficiency of income. People desire certainty. Configuring structural arrangements and communications that increase perceptions of certainty over income levels are likely to be more effective in motivating positive EWL/pensions behaviour than those that seek to provoke anxiety.

B.1.11 Cognitive and socio-cognitive behaviour change influence models

- The models have been most widely applied in public health contexts, particularly in the context of lifestyle (risk) choices.
- They focus on individuals at the unit of change, rather than the contextual (structural and socio-cultural) elements. In this respect they contrast with the nudge perspective, but both could be used in a complementary manner.

- They are rooted in the rational choice perspective, i.e. the assumption that human behaviour is the product of a rational appraisal of costs and benefits of different actions.
- There is quite strong evidence that they can play a role in changing people's orientations to issues, e.g. risks to their future well-being. However, their impact tends to be modest in the presence of strong structural and cultural counter-influences.
- Claims of their impact on behaviour are to be dominated by findings reporting rates of behaviour intention (rather than behaviour).
- **Stages of change** approaches have been widely adopted; however, there is limited evidence that a staged approach is superior to alternatives.
- There is potential utility in the use of the stages of change concept as a way of segmenting the population to provide a focus for policy thinking over intervention strategy.

B.1.12 Designing policy to nudge people to work longer and save for retirement

- The choices people make are often sensitive to whether options are framed as gains or losses. In many instances people are loss-averse.
- If individuals are to be successfully nudged to extend their working life it is important to change the perception that they are entitled to retire at 65.
- The **endowment effect** implies that individuals will need to be offered significant compensation to give up their 'entitlement' to retire. Framing options as avoiding financial penalties are likely to be more effective than a focus on portraying gains.
- There is strong evidence of higher pension take-up where the default is an 'opt-in'.
- Status-quo bias – people tend to shrink from changing investment choices for fear that they may make **the wrong choice**, i.e. the avoidance of regret. They make mistakes because they are afraid to make mistakes.
- When an increase in choice increases complexity, individuals are more likely to procrastinate. One way to nudge individuals is to reduce 'choice overload', possibly through channelling choice.
- Setting deadlines over EWL and pensions investment options can go some way to ameliorate inertia and **status quo bias**.
- Individuals behave as if they assign money to different 'mental accounts'. There is scope to take advantage of mental accounting when setting incentives.
- Paternalists set out to do 'what is best' for individuals, but the experts do not always agree on what is best. There is also the presumption that the experts are a disinterested party. Defining the best choice that individuals should make can be problematic.
- Policy-makers may claim that they nudge individuals in a very general way, e.g. to save, diet and exercise, but effective policy nudges must be more specific than this.
- There is evidence that policy nudges may advantage different groups in different ways. It is important to recognise that nudge may have very little impact on those who have little autonomy and choice over their access to work and working arrangements.

B.2 Introduction

B.2.1 Background and context

Despite headline public health concerns over an array of lifestyle issues, people are also not only living longer but in general are healthier, more physically able and active in older age than in previous generations. However, increased longevity brings with it new challenges to individuals and the State, not least with respect to financial provision for old age. At a societal level the impact on the ratio of working to non-working life years has raised concerns, most acutely in the Western world, over the sustainability of established State and private pensions arrangements.

Beyond fiscal concerns over the sustainability of established retirement norms (historically, 65 years and earlier in the UK), recent years have witnessed calls from the ‘grey-lobby’ for enhanced access to work on the grounds of social inclusion. Interest has also been expressed by employers’ groups, conscious of skills shortages and attracted to the benefits of flexible working arrangements. Current UK Government policy is that the minimum age at which State Pension will be claimable will be raised, incrementally, from 65 years to 68 years by 2046 (Pensions Bill 2011). However, it is equally apparent that around one-third of the working population withdraw from the labour market significantly before the age of 65 (National Association of Pension Funds (NAPF), 2010). There is also evidence of a widespread cultural orientation towards retirement amongst the over 50s, this being, in part, attributed to employment policies and practices during the 1980s aimed at alleviating youth unemployment.

The socio-economic implications of increased longevity have led the UK Government to prioritise finding ways to erode established norms over work and retirement, to encourage individuals to remain in paid employment for longer. Beyond the economic imperative, this strategy has been justified on the grounds of enhancing social inclusion ‘... to end the perception of older people as dependent; ensure that longer life is healthy and fulfilling; and that older people are full participants in society’ (Department for Work and Pensions (DWP), 2005) and to offset the potential for broadening social disparities in standards of living in older age.

The last decade has witnessed increases in rates of employment amongst the over 50s, however, approximately one-third of men aged 55-64 and one-third of women aged 55-59 are currently unemployed, inactive or retired. In social policy terms this presents a number of challenges, in particular the prospect of a pensions crisis and widespread hardship in old age. Changes in the economic base leading to a decline in employer pensions, post-war demographics, the high post-war birth rate and increased longevity, combined with the legacy of a culture of early retirement rooted in the 1980s have led to the widely held conclusion that the cost to the State is unsustainable. Further considerations relate to calls for enhanced flexibility over the age of withdrawal from paid employment from employers, in order to address skills shortages in key areas and grey interest groups, on the grounds of social inclusion.

Reflecting alignment with key policy objectives on EWL in other European States, the DWP has a long-term objective of finding ways to encourage more people to work up to and beyond SPA. The DWP’s EWL policy team has strategic responsibility for all aspects of older worker employment. A core element of its remit relates to finding ways to stimulate higher rates of employment amongst individuals aged 50–69 years.

Key public policy objectives in this area include:

- influencing employer orientations, policies and practices pertaining to the employment of older workers;
- enhancing opportunities for non-working older individuals to return to paid employment;

- encouraging employees to remain in paid employment for longer;
- encouraging employees to make enhanced financial provision for retirement.

With the objective of maximising the impact of public policy aimed at motivating extended working life (up to and beyond SPA) and pension investment, the DWP has commissioned extensive research into the array and relative importance of (cognitive and socio-cultural) variables that influence people's retirement orientation(s) and decision-making.

This report reviews and synthesises the evidence from DWP commissioned research and the wider evidence base on EWL and pensions policy. The review represents the initial phase of an evidence-based approach to policy development in this domain.

B.3 Aims

- To review and summarise what is known of public orientations, attitudes and behaviour regarding EWL including pensions and provision for retirement.
- Summarise and interpret key findings, referenced to established social science insights on decision-making, motivation and communication – relevant to the formulation interventions designed to enhance public knowledge and disposition towards EWL.

B.3.1 Research scope

The EWL and pensions evidence bases benefit from qualitative and quantitative contributions, including large-scale national survey data. This is a useful feature in so far as it provides insight into not only what people know, believe and how they behave but also aspects relating to the underpinning rationale. On some issues there is also scope for a valuable element of triangulation, e.g. the extent to which different studies report common (or disparate) findings; the extent to which qualitative findings appear to generalise when explored using representative samples.

The review focuses on evidence relating to public/employee orientations, motivations and behaviour, rather than those of employers. This emphasis reflects the focus of commissioned research to date, which has tended to limit the consideration of influences to aspects of individual volition and decision-making. By contrast research into contextual (socio-cultural, workplace climate/culture and structural) influences has been modest, and largely limited tapping public/employee beliefs surrounding these. This imbalance within the evidence base constitutes the primary limitation of the review.

A further limitation, however, is that hard behavioural data is very limited, attitudinal evidence predominating, i.e. post-hoc reflections and rationalisations for past/current behaviour and intentions regarding future behaviour.

The relationship between attitudes and behaviour can be complex, and is prone to vary with the issue under consideration. However, a general and resilient finding is that attitudes tend to be a weak predictor of behaviour, particularly in instances where the attitude has a positive frame and where engagement in the related behaviour brings with it a time, effort, social or financial cost. Put succinctly, a change in behaviour is a stronger (and more reliable) predictor of attitude than attitude is of behaviour (see Wicker, 1969).

More positively, there is a sound basis for inferring the direction of behavioural change from a measured change in attitude over time, e.g. comparison using a common assessment tool at time 1, time 2, etc. But, caution needs to be exercised where absolute values are presented, not least because people are disposed to responding to questionnaires, in interviews and in focus groups in socially desirable ways, i.e. ways that portray themselves in a positive light and ways that offer a plausible rationale for their behaviour.

When asked to account for past behaviour and future intentions, people are prone to exhibiting an array of biases of causal attribution, the most salient of which in the current context are self-serving and self-other biases:

- **Self-serving biases** – include selecting plausible rationalisation for past-behaviour (**hindsight bias**) that are socially acceptable/desirable (rather than necessarily the true volition); similarly portraying oneself as a victim of circumstance (**externalisation bias**), rather than a free agent. This can extend to post-hoc modifications of previously held attitudes to fit (justify) behaviour, in order to reduce cognitive dissonance.
- **Self-other biases** – relate to volition and causality, e.g. the tendency to view failure in others as a product of their personal shortcomings, whilst considering one's self to be a **victim of circumstance**.

The principal implication of the above is that the ELW and pension behaviour evidence base requires careful interpretation. This review aims to be sensitive to these issues though a critical perspective that highlights areas where such effects may cast doubt on the reliability of *prima facie* evidence.

A key challenge to the interpretation of findings is that no single behavioural science discipline or paradigm offers a sufficiently embracing perspective. The application of this knowledge in policy domains requires a pragmatic assimilation and harmonisation of the, at times, contradictory, contributions from cognitive psychology; behavioural economics, social psychology, socio-cultural theory and related perspectives. This is not trivial, as there are a number of fundamental differences in terms of theoretical underpinnings, approach to investigation and conceptions of the basis for human action.

Members of the research team were selected on the basis of their ability to reflect these perspectives, their experience of working closely with policy-makers, understanding their research and evidence needs and of translating behavioural science insights into practice.

B.3.2 The evidence base

From the outset, it was agreed that DWP-commissioned research on EWL, pensions and retirement would constitute the core evidence base for the review. This was supplemented with material derived from web-based key-word searches, published texts, refereed journal articles and grey literature publications. International evidence was included in instances where there was sufficient alignment with UK employment law and pensions arrangements.

In addition to published materials, the British Social Attitudes Survey (BSAS), the English Longitudinal Study of Ageing (ELSA) and the DWP's National Attitudes to Pensions Survey (NAPS) (2006 and 2009) data bases were interrogated with a view to identifying and analysing variables, combinations of variables and potential relationships that could contribute to answering the key research questions.

In view of the current (relatively high) cultural profile of pensions issues and EWL, in the UK following the recently announced planned rise in SPA, combined with media coverage of equivalent events in other EU Member States, and their impact on public orientations to EWL, all searches were restricted to a post-2000 time frame.

B.3.3 Structure of the review

The review is configured as a compendium of evidence on public attitudes/orientations and behaviour regarding EWL and pensions referenced to:

- key policy questions;
- techniques for charactering public orientations;
- contemporary models of behaviour change.

This is supplemented with sections that relate to the status of evidence, in particular aspects relating to the limitations and boundaries of the EWL and pensions evidence base, notably what can be concluded on the basis of retrospective, intention and attitudinal data.

Each section is designed to stand alone, so that the reader is not burdened with the need to read the document in its entirety. Necessarily, this embodies a degree of repetition where common findings are of relevance to multiple key questions. Signposts are provided within each section to highlight instances where there is read-across to other sections. While there has been extensive effort to harmonise the text, minor differences in drafting style, reflecting the contribution of multiple authors and disciplinary perspectives, will be apparent between sections.

The set of key policy questions were generated through discussions between the review team and with the DWP's EWL team. These were identified as:

- How do the public view EWL beyond perceived age of retirement?
- To what extent does decision-making over retirement and pensions reflect the presence of cognitive biases, recourse to heuristic reasoning or affective reactions?
- To what extent do the public actively engage in decision-making over EWL and pension provision, the point(s) in their lives that people contemplate retirement and pensions and what stimulates this?
- What is the nature of any information needs, knowledge gaps and misunderstandings with respect to retirement and pensions?
- Orientations to sources of information and advice over extending working life, retirement and pensions?
- Perspectives on employability, employment options, training and beliefs regarding employer practices and older workers?
- The impact of the (2012) rise in SPA on attitudes to EWL.

Other sections address:

- Mental models of retirement, pensions and EWL.
- Designing policy to nudge individuals to work longer and save for retirement.
- The applicability of cognitive and socio-cognitive psychology behaviour change models to EWL and saving for retirement.

B.4 Method

It was recognised by the DWP that:

- the Department had amassed a large body of dedicated and relevant research evidence on EWL;
- much of the available evidence needed to be distilled to address the key EWL policy questions outlined in Section 2.1;
- the evidence base was dominated by descriptive findings that required interpretation, referenced to established insights on human behaviour, in particular decision-making and behavioural change evidence;
- there was some contradiction between study findings and the bases for this needed to be examined;
- findings from qualitative studies, based on small samples, needed to be examined and, where possible, verified with reference to evidence from large-scale (representative) survey evidence;
- a review of the amassed research evidence base would permit the identification of evidence gaps.

By intent, the approach was not a systematic review, but an interpretive assimilation of the extensive research commissioned by the DWP, UK National social survey evidence, supplemented with evidence from other published material from the UK and international contexts.

The evidence base was constructed from:

- recent (2000–10) DWP commissioned research reports, identified through discussion with members of the EWL team and DWP social researchers, supplemented with a web-based key-word search;
- web-based key-word searches of non-UK Government-funded research including EU and other State-sponsored work and grey-literatures e.g. research commissioned by the pensions industry;
- Key word searches of analytical abstracts for peer-reviewed journals, books and other publications, using the University of Bath's Electronic Library Information Navigator (ELIN) system;
- Published reports and data bases from the BSAS, the ELSA and the DWP's NAPS (2006 and 2009).

A bibliography of the key references that comprised the evidence base for the review is provided at the end of this report.

B.4.1 Approach to analysis

The approach to analysis comprised an integration of four linked activities focused on answering the key research questions outlined in Section B.3.1.

- An interpretive themed analysis of published research material referenced to the defined key policy questions.
- An analysis of secondary quantitative data (defined variables and derived variables) sourced from the BSAS, ELSA and the NAPS (2006 and 2009) data bases.
- Based upon insights derived from (i) and (ii), the production of schematic variable maps/influence models and mental models that characterise public(s) beliefs, understandings and orientations.
- A consideration of the applicability of cognitive and socio-cognitive perspectives on decision-making/behaviour change to EWL and pensions.

B.4.1.1 *Thematic analysis*

The core aim of the review was, not only to distil findings from an array of sources of varying foci to achieve alignment with the EWL agenda but to relate and interpret the product in terms of established theoretical insights on human decision-making and behaviour. The premise here was that a theoretically informed insight into the basis for contemporary public orientations to EWL was necessary to inform evidence-based policy thinking over future intervention strategy to achieve behavioural and cultural change.

Given the interpretive focus of this review and the predominance, by volume, of qualitative evidence the approach to the core analysis centred on identifying key and recurrent themes and their constituent facets, that mapped onto the research questions detailed in Section 2.1. In essence, what was performed was an interpretive thematic analysis, supplemented by quantitative evidence derived from the available social survey data. This approach permitted an articulation of points of agreement and departure in qualitative findings, while affording a valuable degree of triangulation, where possible, with survey evidence derived from representative samples.

Findings have been interpreted with reference to the extensive evidence on cognitive, socio-cognitive and socio-cultural influences on decision-making, in particular decision-making in relation to risk, public concerns and stakeholder engagement. Beyond rational-actor perspectives and the role of incentives lie elements that relate to heuristics, cognitive biases, habit and an array of social and cultural normative influences, as well as inter-relationships with characteristics of the choice architecture.

Again, following contemporary qualitative research practice, evidence in the form of quotations from respondents cited in the reviewed studies is used to exemplify and illustrate the interpretation placed upon findings. Quantitative social survey evidence is used in an equivalent manner.

The approach to referencing in this document deviates from established precedents over style in referring to research commissioned by the Department of Work and Pensions in abbreviated form. The rationale for this is twofold:

- the review is aimed at policy-makers and government social researchers. Referencing sources by their index, e.g. DWP 557, allows the reader to readily differentiate between government commissioned research and other sources;
- referencing government reports by their index number permits brevity in instances where multiple sources are cited, e.g. to provide corroborative evidence.

B.4.1.2 *Secondary data analysis*

The analysis of secondary data was designed to complement and mesh with the review of published evidence.

The theoretical governed approach to interpreting the existing literature and secondary data analysis using the ELSA database permitted the development of a model of factors influencing decisions about when to retire (Figure B.3, Section B.5.4). The ELSA data was used to explore features of the model and to test its key predictions.

B.4.1.3 *Schematic model building*

This section extracts insights from the review evidence base to characterise public mental models of retirement, pensions and EWL referenced to a range of intrinsic and extrinsic influences that may inhibit or facilitate decisions. This characterisation embodies: cognitive orientation, emotional orientation, behavioural orientation (intentions), stakeholders and structural factors.

B.5 Insights referenced to key policy issues

B.5.1 **How do the public view extending working life beyond perceived age of retirement?**

Key findings

- Widespread recognition of the logic of the need to finance increased longevity through extending working life does not translate into a belief that *‘I should extend my working life’*.
- The option for pre-SPA retirement is a highly valued and widely encountered aspiration.
- Being able to choose how to spend your time, rather than having this determined by work seems to be a key incentive to retire.
- There seems to be significant demand for post-SPA employment where this is a voluntary decision embodying choice, particularly over hours of work.
- Most who would consider working post-SPA want to remain with their current employer.
- Most who would consider working post-SPA want part-time employment, but believe that there are insufficient opportunities for this without downshifting.
- The demand for downshifting (less responsibility/lower skilled work) is low.
- Different social groups have different attitudes and intentions regarding EWL.

B.5.1.1 Social acceptability

In unpacking this issue it is important to recognise that it embodies two distinct but linked strands: firstly, how people view EWL as a **social** issue, i.e. whether they see it as a **social good**; and secondly, the extent to which they see it as a personal issue that relates to them. This distinction is important as despite widespread recognition of the need for EWL at a societal level, this does not seem to translate into a commitment to extend one’s own working life (DWP 531).

Care should be taken not to infer individual action on the basis of broad-based attitudinal evidence e.g. a majority response to questions of the type *‘Do you think that working life should be extended beyond the current retirement age?’* should not be taken as evidence that most people are willing to extend their own working life.

B.5.1.2 Social value of work

The ‘human costs’ of worklessness experienced by 2.8m people aged between 50 years and SPA include disillusionment, depression, ill-health, poverty, insecurity and social exclusion (Performance and Innovation Unit, 2000). This might be expected to increase motivation to EWL. However, it seems that for many this is outweighed by the attractiveness of ceasing work before SPA, most viewing post-SPA working as a penalty (see, for example, DWP 557).

While work brings financial and social benefits, it seems that many individuals ultimately view it as a means to an end and retirement as a right of passage (and reward); a period in which to spend the short time remaining as one chooses. Even those who enjoy work appear to look forward to stopping and the opportunity to do other things. Being able to choose how to spend time, rather than having this determined by work seems to be a key incentive to retire (Hedges and Sykes, 2009).

In short, it seems that there is a degree of ambivalence about work. On the one hand, it is socially valued as a source of financial and personal benefits, on the other it is perceived as imposing costs on the individual by displacing more enjoyable activities. It seems that this trade-off becomes less satisfactory in old age and there is an expectation that people should be entitled to enjoy a lengthy period of active retirement. The paradox is that while work is socially valued over unemployment, it is not valued over retirement, even though both are forms of economic inactivity that potentially embody hardship. The differentiation between unemployment and retirement has a formal dimension in terms of entitlement to State Pension and employers' right to retire '*poorly performing*' older workers, but there is also a degree of volition over when individuals feel that their working life should end.

B.5.1.3 Social status and work

The relationship between social status and paid employment is bi-directional. Social groups that are accorded low status and perceived to have diminished capacity or competence may be discriminated against in the job market, but active participation in paid employment can also raise social status and challenge prejudicial assumptions. It has also been suggested that an increase in rates of employment amongst older people may have the effect of reducing ageist orientations in the wider society, i.e. the suggestion is that exclusion from economic activity feeds, or is perhaps a defining influence on the social marginalisation of older people.

A potential pitfall of anti-discriminatory (or even positive discrimination) employment legislation aimed at older workers is the danger that younger people may view the retention of older workers as reflecting legal obligations rather than being grounded in merit. In this context, pay scales that reward tenure could foreseeably become a source of tension.

B.5.1.4 Retirement preferences and ambitions

Many of the factors that influence retirement lie beyond the control of the individual and cannot easily be forecast, for example, serious illness, redundancy or caring responsibilities may occur suddenly in an individual's life and derail their preferred work/retirement strategy. Even so, there remains some value in exploring people's preferences.

Evidence from a range of sources indicates significant levels of latent demand for post-SPA employment. A recent survey of the over 50s found that 80% of respondents claimed to be interested in continuing to work beyond SPA (McNair, 2010). Other sources suggest that of those who expect to be pushed out of work at SPA (74%) 60% of them have an interest in undertaking further paid work after this (DWP434). Although there are detail variations by source, it seems safe to conclude that there is significant potential demand for post-SPA employment. However, it is important to keep in mind the limitations of attitudinal data and the potential for attitude-behaviour disparities.

Significant social variability is apparent regarding ambitions and expectations over the age of retirement (see DWP 434):

- younger workers are more likely to expect to work longer. This may reflect a shift in cultural expectations, but may also reflect limited exposure to any need to juggle/engage with factors that can lead to early retirement, e.g. ill-health or caring responsibilities;
- the self-employed also expect to retire later, possibly due to pull factors such as greater job control, or due to push effects relating to lack of pension provision;
- higher earners appear to be more culturally disposed to EWL, but also have less economic need to do so, i.e. they enjoy significant autonomy over the point of withdrawal;

- Gender differences appear to be modest. However, Smeaton *et al.* (2009) report that less than one-tenth of working women wish to retire before SPA (when set at 60 years), compared with one-third of men wishing to retire before 65 years. This seems to be reinforced by reports of modest differences in the preferred age of retirement for men (63 years) and women (62 years) (DWP 434).

Turning to the demand for downshifting and flexible working, Maitland (2010) found the majority (62%) of workers in their 50s report feeling as fit as they ever had. Perhaps surprisingly, just 4% of the over 50s wanted to downshift, this being more than balanced by those who held promotion aspirations (11%). The impression is that many older workers, rather than wanting to downshift or disengage are actually keen to continue their careers at full capacity, perhaps because many continue to have substantial financial commitments. Nearly a quarter of 56–59 year-olds report a need to provide financial support to their offspring (Equality and Human Rights Commission (EHRC), 2010).

Although comparatively few older workers seem eager to downshift, there does appear to be widespread support for the concept of flexible retirement. The Euro Barometer Survey 2002 reports 78% of respondents agreeing with the premise that older workers should be allowed to retire gradually. However, flexible retirement behaviour seems to remain relatively rare, due to significant structural and cultural barriers to older workers negotiating a transition to flexible working with their existing employer.

Aspirations and expectations regarding retirement may be largely determined by personal circumstances and lifestyle choices, but they are not entirely immune to the broader policy dilemma of funding retirement. Clery *et al.* (2007) explored attitudes to EWL in the context of preferences for the long-term funding of State Pension and found that 85% of respondents claimed that they were prepared to work beyond SPA to ensure a higher standard of living, compared with 43% who preferred increased taxation; 29% who favoured an increase in the SPA; and 18% who preferred a cut in the value of the pension (also see McNair, 2010).

There appears to be little reliable evidence of how individuals (and families) calibrate the trade off between retirement age and standard of living, i.e. how much longer people are prepared to work and how big the improvement in living standards would need to be to make it an attractive proposition.

In short, although it sounds tautological, there is evidence that many people want to retire early, but a significant proportion are prepared to carry on working, as long as this embodies choice and is not a forced option. People in their 50s mostly appear to want to continue working at full capacity, with a greater proportion seeking promotion than wishing to downshift.

Most would prefer to continue working for their current employer. However, it is apparent that the opportunities for flexible work are limited and concentrated in certain sectors (Chartered Institute of Personnel and Development (CIPD), 2007).

B.5.2 To what extent does decision-making over retirement and pensions reflect the presence of cognitive biases, recourse to heuristic reasoning or affective reactions?

Key findings

- Widespread concern over post-SPA income does not seem to motivate engagement with planning or increase the attractiveness of EWL.
- EWL is framed as a loss, in terms of leisure time and active life years, which is not outweighed by financial gains from enhanced income.

- Large numbers claim to be amenable to the idea of EWL as long as this is not a forced option and they have flexibility over hours worked.
- Choice, flexibility and control over the need to work, type and hours of work are highly valued, but unevenly distributed and unevenly realisable between social groups.
- EWL is not salient to most people. There are few precedents in the workplace and many do not see it as an option open to them.
- The concept of phased retirement is unfamiliar to most. However, there seems to be significant attraction to the idea.
- Employers constitute a more important normative influence over how and when to retire than other social references, e.g. family, community.
- The rise in SPA adds to perceptions of uncertainty over provision for retirement and may feed disposition to retreat from planning.
- The rise in SPA challenges public conceptions of fairness and social equity and serves as a barrier to engagement with the EWL agenda.
- Widespread recognition of increased longevity does little to diminish individual dread perceptions regarding ill-health/an early death.
- Detailed understanding of tax and pensions is very limited, and is, at best, considered vague and impressionistic. Education initiatives are unlikely to have a major impact on this.
- People are positive towards the concept of pensions but confidence in realisable pension values is seriously eroded.
- Evidence of predominantly vague and impressionistic understanding of pensions and the tax system raises questions over the utility of using incentives, e.g. tax relief, to stimulate pension investment.

B.5.2.1 Overview

Human beings are prone to an array of lapses, biases, and other deviations, from formal logic in decision-making in situations of uncertainty. They are also prone to taking mental short-cuts, (applying simple heuristic rules of thumb) to reduce cognitive load when dealing with complex issues (Tversky and Kahneman, 1974; Kahneman and Tversky, 1981; Kahneman and Miller, 1986; Thaler and Sunstein, 2008 and others).

While it is easy to dismiss such tendencies as evidence of human irrationality, the consensus is that more is to be gained from understanding variables that contribute to such phenomena than attempting corrective solutions (Royal Society, 1992; Fischhoff, 1995). This is very much the perspective of the influential policy orientated text nudge (Thaler and Sunstein, 2008). It is also important to keep in mind that despite the research focus on deviations from rationalism, it would be unwise to view this as the dominant characteristic of human decision-making. Most decision-making is essentially rational, or at least reflects internally consistent processes.

The largest contribution, by volume, in this area comes from cognitive psychology and behavioural economics. However, there are complementary insights from social psychology, sociology and social anthropology. This section will attempt to integrate these findings with what is known of decision-making and underpinning public orientations to EWL and pension investment.

B.5.2.2 Heuristics

Heuristics are, in essence, rules of thumb, educated guesses and intuitive judgements. They are essential mental shortcuts that all people routinely use to support their everyday existence. People tend to apply heuristics to save time and/or to reduce cognitive load, particularly when faced with complexity and unknown/unknowable outcomes. In such instances, people are prone to fall back upon simpler intuitive reasoning. In effect, a cognitively difficult problem is dealt with by selecting and answering a simpler problem, based upon a sub-set of (what are taken to be) the most salient criteria.

In terms of the criteria that individuals draw upon in formulating their heuristics, these tend to be derived from prior experience/knowledge of equivalent or similar situations and inferential sense making. By extension, they can embody affective/emotional elements and/or draw upon socially derived, shared understandings, values and norms.

There is little to be gained from the perspective that heuristic reasoning is something which can or should be discouraged. Rather, the key insight in terms of public engagement relates to understanding this characteristic of human decision-making and devising policy solutions that take account of it.

B.5.2.3 Cognitive biases

The concept of cognitive bias is linked with evidence of heuristic reasoning. Specifically, as well as exhibiting recourse to heuristic reasoning, human beings **can** (some would suggest are prone to) exhibit an array of identifiable and predictable biases in decision-making in situations of uncertainty.

A significant array of biases and related effects has been identified, the most widely evidenced, and most pertinent to the current endeavour, are:

- **availability** – the ease with which outcomes can be brought to mind. Effects relate to a disposition to select familiar solutions or options, e.g. retirement at age 65; but can also relate to the ease with which consequences can be brought to mind, in particular the consequences of failure, e.g. the tendency to overestimate the likelihood of pension failure or ill-health. There are linkages with dread (see below) – the tendency to focus on the consequences of undesired outcomes, rather than their likelihood (see Tversky and Kahneman, 1974);
- **anchoring and adjustment** – the tendency to consider an option referenced to a known value, in essence, a focus on relative rather than an absolute value in options appraisal (see Tversky and Kahneman, 1974);
- **representativeness** – a tendency to focus on a single (or small number of) attributes/variables, rather than multiple variables and interactions between them (see Tversky and Kahneman, 1974);
- **attribution bias** – relates to an array of biases, but most saliently to volition and causality with respect to the self (self-serving bias) and the self referenced to others (self-other bias). Linked concepts include cognitive dissonance – the desire to resolve dislocations between attitudes and behaviour and the tendency to modify attitudes to account for behaviour (see Jones and Nisbett, 1971; Ross, 1977);
- **unrealistic optimism** – a specific type of error of attribution that can embody elements relating to social comparison. In short, the belief that one is less vulnerable than would be judged on an objective basis (see, in particular, Weinstein, 1980, 1984);

- **framing effects** – a key finding here relates to **domain effects** (Tversky and Kahneman, 1974). Framing options as gains or losses can impact on preferences. A general finding is that people tend to be loss-averse, unless offered a long-odds option as an alternative to a certain loss (see Kahneman and Tversky, 1979; Kahneman and Miller, 1986; Fagley and Miller, 1990);
- **psychological time** – insights from a range of perspectives, highlight the importance of psychological time. Caution tends to be inhibited where negative outcomes are delayed (see Bjorkman, 1984). There is also a general preference for certain gains in the ‘here and now’, over future benefits, particularly where the future is uncertain (there are linkages with anchoring and adjustment effects see above). Sociological contributions point to differences in value structure by social class, concluding that **differed gratification** is more highly valued by professional and managerial groups (see Straus, 1962).

Building on the work on heuristics and biases, insights from the psychometric perspective on public concerns are also of relevance (for a summary see Slovic, 1992). This work set out to identify core characteristics of hazards and risks that impact on public perceptions. There is consensus over the orientational influences listed below. These variables can be broadly construed as operating in a manner akin to heuristics and biases, however, they are conceived as characteristics of hazards/risks that stimulate public reaction (profiles may also vary between different social groups).

- **Dread** – the tendency to focus on outcomes, rather than their likelihood, in part due to cognitive availability (see above). Where outcomes pose high-cost threats to well-being and where individuals feel vulnerable this tends to amplify public concern (not just with the issue, but with those perceived as responsible for the issue).
- **Unknown** – where solutions are unknown (not just to the public but to experts) and/or where there is uncertainty over the future this tends to amplify public angst and concern.
- **Control** – is multi-faceted. Where individuals perceive that they have control over their exposure/destiny concern/opposition tends to be attenuated. Conversely, if people feel that choice is constrained or that they are subject to forced options this tends to amplify concern and dissatisfaction. Control, in terms of voluntarism and personal volition, is also salient to perceptions of social justice (see Tausch *et al.*, 2010). Complementary findings on self-efficacy and locus of control highlight the role of agency, i.e. the degree to which individuals feel able to impact on their future (see Bandura, 1980; Fishbein and Ajzen, 1980; Ajzen, 1985) .

Although derived from a wholly separate perspective, social psychologists, sociologists and socio-cultural researchers have highlighted an array of influences, which might pragmatically be construed as operating as cognitive filters (Kasperseon, *et al.*, 1988). In terms of the manner in which they are thought to operate there are analogies with the heuristic and biases insights, in so far as they are said to operate in a dispositional manner, embodying basic beliefs about the world and the way that it **does** and **should** operate.

- **Fairness and equity** – notions of fairness and equity are deeply embedded, but are perhaps best expressed as a widely held aspiration, rather than an expectation of the social and institutional world; the focus of public concern tending to rest with instances of perceived unfairness and inequity, where equity is desired (see Fischhoff, 1995; Tausch *et al.*, 2010). Contributions here come from an array of paradigms and perspectives, however, a global finding is that where injustice and disparity is perceived this can foster public concern, in some instances extending to outrage (see below).

- **Trust** – specifically trust in stakeholders. As in the case of control, insights on trust are multifaceted. Contributory influences include competence, social responsibility and acting in the public interest, with linkages to issues of blame and accountability. However, there is strong evidence that trust in professions, organisations and the State is more complex than a single judgement value, rather the profile tends to be subject to variability referenced to the issue under consideration, in particular elements relating to perceived vested (routinely economic) interest (see Petts, 1998; Pidgeon *et al.*, 2003a; Section B.5.6).
- **Outrage** – has linkages with notions of social (in)justice, (un)fairness/(in)equity, (mis)trust, blame and accountability. In essence, situations where the public/sections of the public perceive that others have benefited from their loss, particularly in instances where it is believed that this has gone unchecked, e.g. instances where regulators, (g/Government) or other bodies have failed to redress perceived unreasonable exposure to harm by businesses/professionals. Outrage can contribute to the social amplification of public concern, typically fuelled by media interest and orientation (Pidgeon *et al.* 2003b; Breakwell, 2007).
- **Cultural biases** – aligned with the anthropological work of Mary Douglas and more recent social research, there is evidence that shared norms, values, attitudes, beliefs, practices and common experiences can operate as cognitive filters. Douglas offers a typology of different social groups in terms of their value structures (Douglas, 1982). Other authors offer a more organic perspective, pointing to normative influences derived from shared experience, e.g. locale (Wynne, 1989).

As noted above, despite extensive research interest in deviations from rationality, it would be unwise to view irrationality as the dominant characteristic. The majority of human decision-making is best characterised as a logically consistent, rational inductive/deductive process. The range of biases outlined above, and the tendency to resort to heuristics is a characteristic we all exhibit and is not solely a product of educational deficit, although knowledge gaps are routinely encountered.

Impact on engagement with EWL, retirement planning and pension investment

The overwhelming picture of public engagement with the EWL agenda is that for most there is little thirst for seeking out information on this issue, to the extent ‘... *that any information the Department [DWP] puts out on this subject will not find an audience eagerly waiting to collect and digest it.*’ (DWP 557, p.114). Rather, pre-retirement behaviour can more reasonably be characterised as people passively reacting to events as they unfold in the context of incomplete knowledge (DWP 531) ‘... *in general, relevant information held by respondents seemed to have been acquired piecemeal and incidentally rather than [having been] systematically sought out ...*’ (DWP 557, p.102; DWP 434).

EWL is not salient to most people, partly because they do not view it as an option available to them (DWP 299; DWP 557; DWP 673), the cessation of work at SPA being deeply culturally normed, and partly because of the positive frame of **gains** in leisure time (DWP 557; Low-skilled, 2010). A recent EU-wide survey reports 55% of respondents as resistant to EWL, 29% claiming a reduced income was not a disincentive to withdrawal (AON Consulting, 2007).

‘*The model that suggests people tackle problems in their lives by collecting and analysing evidence as a basis for developing informed strategies does not describe the approach that most ... participants have been taking to retirement.*’ ‘*Decision-making is influenced not only by factual information but also by feelings and images [affect].*’ (DWP 557, p.115). Thus, rather than engaging in rational systematic evaluation people tend to react to circumstances as they arise and to rely upon simple **heuristic** reasoning, possibly extending to **affective** reactions (also see DWP 299).

The issue is not simply one of lack of understanding and the difficulty experienced in manipulating salient variables to arrive at a decision (**bounded rationality**) but the reality that *‘most people do not find pensions [and other post SPA planning] interesting. Even when they are within 10 years of likely retirement age, many [43% – DWP 193] individuals will not have given much thought to their retirement circumstances ...’* (Vickerstaff et al., 2004).

There are also reports of denial (possibly extending to **unrealistic optimism**) about the personal implications of an under-financed retirement (DWP 557), however, a more dominant finding is notable angst (**worry/concern**) over levels of retirement income; *‘Not knowing how much income to expect in retirement is very unsettling ... [but this] ... tends to [further] paralyse already weak impulses to plan ahead.’* (DWP 557).

Amongst those who do plan, social groups A and B are overrepresented. A primary motivation seems to be not so much one of seeking to maximise income (**gain frame**), through EWL, but to minimise income tax liabilities (**loss frame**) (DWP 531). The motivation to EWL here appears to owe at least as much to intrinsic job satisfaction and social benefits as instrumentalist orientations.

Findings on reactions to the concept of a phased retirement (DWP 557) indicate that, while a sizeable proportion appear amenable to the idea, the option is essentially *‘not on their radar’* (**bounded rationality**), there being limited social precedent in the workplace. Thus, few are able to readily bring to mind (**cognitive availability**) models of how phased retirement might work, particularly in context of continuing to work for their current employer; *‘... many people seemed to be reviewing the ideas we presented to them for the first time.’* (DWP 557, p.52), i.e. the degree of disjuncture with the norm is such that mental models of options are not intuitive or substantially complete.

Levels of awareness of pension deferral options are also modest (particularly amongst younger employees) and, where present, tend to lack detail (DWP 434), with consequent scope for misunderstanding. Many, it seems, fall back on an heuristic that pensions must pay out at SPA. In this context, the question *‘When should I start drawing my pension?’* makes little intuitive sense.

Reactions to the idea of referral also appear to focus on a **loss frame**, *‘... there was an instinctive conclusion that they would lose out – because they would lose payments they were not claiming, rather than focusing on the higher rates they would potentially receive at a later date ...’* (DWP 557), the latter appearing to be tainted with **uncertainty** and the potential for loss *‘... there were questions over what happens if you die before you withdraw it...’* (DWP 557), but potentially a more positive (**gain frame**) orientation surrounding *‘... whether it would be transferable to your family?’* (DWP 557).

Presenting respondents with financial information relating to the respective implications of varying their date of retirement and pension deferral on pension values appears to provide an effective **anchoring** effect, in so far as relative change over time becomes transparent (DWP 557). However, this does not seem to significantly increase enthusiasm for EWL. *‘As with SPA equalisation, while some thought the idea [of pensions deferral] was a good idea, in principle, the vast majority of interviewees were not considering deferral for themselves.’* (DWP 531, p.97).

A significant proportion, concentrated within social groups C2, D and E are highly oriented around the perspective that they have **earned their right to retire** and are, consequently, likely to be the most resistant to engagement.

Choice/flexibility/control

In terms of EWL, issues of control, choice and flexibility are perhaps best construed as orientation phenomena. Retirement is not only highly valued by most individuals but considered a right of passage and just reward for the years of labour. It is, therefore, understandable that many see any externally imposed erosion of this period as a loss, whether due to rises in SPA, or enforced by economic need. *‘... they [the public] were very resistant to the idea of being made to work on and thought that people should be free not to.’* (DWP 557, p.34).

Where EWL is a matter of personal volition and choice, orientations tend to be more positive, *‘... generally people like work but want control over what they do and how they do it’*, they also want **choice** over whether they have to work or not, i.e. they are likely to be highly resistant to what they perceive as a forced option (DWP 531), irrespective of differences in their basal orientation to EWL. Qualitative findings highlight gains from providing reassurance that policy objectives for EWL relate to a finite period, of one or two years (DWP 557). However, it seems that a significant proportion of the public have suspicions that any change in SPA represents the thin end of a wedge, such that the recent changes effectively permission future changes.

For many, freedom and choice, over how to spend one’s time is a central retirement orientation; a **gain**. *‘I think for the word “retirement” means having choice. Whereas pre-retire meant you having to work.’* (DWP 557, p.22). Similarly, *‘Most respondents felt that a defining characteristic of retirement lies (or should lie) in taking **control** of their own life and **choosing** for themselves how to spend their time.’* (DWP 557, p.22), and *‘... choice was also viewed as integral to what retirement entails ...’*, wealth and health permitting (DWP 531, p.78).

McNair’s finding that 80% of the economically active claim that they would consider working after SPA (also see EHRC, 2010), provided their commitment was flexible or part-time (McNair, 2007) is widely corroborated: *‘There was a lot of interest in the possibility of flexible working and gradual retirement.’* (DWP 531, p.75; DWP 299; DWP 557). *‘Extending working life will be assisted by individuals having greater **control** over options during the transition ... and greater **control** over the timing of retirement.’* (DWP 299, p.7). From an array of sources, it is apparent that a significant proportion, of not just those over SPA but also those in their 50s and early 60s, are attracted to employment that offers increased flexibility and/or reduced hours (McNair, 2007; Low-skilled, 2010). What is less clear is the extent to which this profile differs from the ideals of younger workers.

However, while there is widespread evidence of latent *‘... interest in the possibility of flexible working and gradual retirement.’* (DWP 531, p.75), the possibility of flexible working leading up to and post-SPA is a relatively unfamiliar orientation and not one that most people commonly encounter in their experience of work and working arrangements, i.e. its **cognitive availability** is weak.

‘Although there is a consensus about the desirability of choice as to when to retire or if to continue working, the ability to exercise choice is unevenly distributed [by social group].’ (DWP 531).

Professionals and senior managerial grades currently enjoy greatest choice over the timing and trajectory of retirement, in particular with respect to hours worked. For these individuals, EWL is very much a choice, in so far as the level of pension provision they currently enjoy largely removes the push effects associated with the need to supplement low income. They are also more likely to continue their established career path rather than seek alternative employment. Ultimately, findings indicate that the degree of autonomy over hours of work, pace of work, etc., are related to job skill and social status, notable exemptions being the self-employed (DWP 299).

McNair, in his attempt at a segmented typology of orientations to EWL, concludes that *‘Those who felt in control of their job changes [promotion/redeployment, etc.] were much more likely to stay in work... and be willing to consider continuing in work after formal retirement.’* (McNair, 2007). In his typification of **Jugglers** (those who retreat from work due to caring responsibilities), **Survivors** (blue collar workers likely to withdraw on health grounds) and **Choosers** (managerial and professional), it is the latter group that enjoy the greatest sense of **control** over the configuration of their working lives, the most positive attitudes to work and motivation to stay on. But, importantly, McNair says that they report fewer opportunities for flexibility than they would like and, as a consequence; *‘Since in general they can afford to retire their general response to these barriers is to do so.’* (McNair, 2007).

The apparent attractiveness of **choice** and flexible working is not just about reducing hours, but over the distribution/configuration of hours. Shift working, for example, is unpopular, the evidence, if anything, suggesting that this tends to increase the desire to withdraw from work (DWP 531).

It should also be borne in mind that greater choice and flexibility over work is attractive to workers of all ages, i.e. it is not just an older person’s issue. Around half the working population desire greater flexibility or a change to their hours of work (EHRC, 2010). The primary limiting factor on take-up seems to be its (un)availability (DWP 531), with only around a third of employers currently offering flexible options (CIPD, 2005).

While there are strong claims for enhanced flexibility having a positive impact on orientations to EWL, it is possible that the research evidence may overstate the case. Specifically, there is scope for self-serving attribution bias, i.e. some (unknown) proportion of respondents may have been motivated to cite **lack of flexible employment opportunities** as a post-hoc justification for withdrawal from employment.

Norms and normative references

Traditionally, economists and behavioural decision theorists construe factors influencing orientations and aspirations towards retirement as a matter of individual choice, rooted in an, at least quasi, cost-benefit analysis of wealth, health and caring commitments. However, there is strong evidence of social and cultural normative influences on decision-making.

Normative influences are generally construed as relating to the influence of shared beliefs, attitudes and behaviours, on individual (and group) orientations and actions, i.e. social norms are, in essence, socially constructed shared ‘rules’, customs and practices. Whether explicit or implicit, they tend to manifest themselves in conformity effects, to the extent that norms equate to the **natural** way of things. In cognitive terms, this might be a case of **availability** bias, i.e. the high salience of the natural order of things.

As noted earlier, mental models of a phased retirement or EWL tend to be incomplete with low **cognitive availability**. A pervasive social norm is the conceptualisation of SPA as a cliff edge (DWP 557), after which paid employment ceases.

It has been suggested that a set retirement age (whether referenced to SPA or employer norms) has an anchoring effect on public perceptions which inhibits constructive thought about when to retire (DWP 673). While this may be true, the normative influence of SPA at (formerly) 60/65 years is likely to continue to operate as a robust cultural benchmark for the foreseeable future, although potentially subject to gradual erosion. Industry/sector norms also play a pervasive role here and interact with established cultural norms. There is evidence that approximately two-fifths of employers enforce a compulsory retirement age (DWP 673).

It is widely reported that many people retain an aspiration to retire in their 50s, particularly those in semi- and unskilled employment. This orientation tends to be ascribed to normative influences, said to have become the established norm during the recession of the 1980s. It is foreseeable that such norms will be stronger/more frequently encountered in the regions which witnessed the decline of traditional manufacturing, heavy industry and mineral extraction, where mass redundancies, which for many in the absence of alternative employment equated to early retirement, were highest.

Against this background, the policy emphasis on EWL, that probably gathered momentum in terms of its media/social profile following the recent announcement of a rise in SPA, has had the effect of stirring sentiments of social (in)equity. Many approaching retirement feel cheated and angry over the prospect of a loss of their free time and ‘*earned*’ (‘*deserved*’ 41% of respondents; EHRC, 2010) income and, as a consequence may be unreceptive to initiatives aimed at EWL (DWP 531; DWP 557).

The normative **anchoring** effect of the work/retirement behaviour of others within peoples social reference groups leaves many resentful (in the sense of unfairness/inequity with previous generations) with the **blame** for being cheated out of leisure years tending to be directed at the Government. ‘*In many cases we found feeling of anger and betrayal [outrage].*’ (DWP 557). ‘*A strong theme ... [was] of retirement as a deserved [equity and justice] reward for a long working life.*’ (p.77). Many in the sample had worked for 40+ years having left school at the age of 15 (DWP531).

Culturally, retirement is **framed** as a brief and limited interlude between work and death, with perspectives on retirement and longevity tending to be normatively referenced to the experience of parents, grandparents and significant others (DWP 531; DWP 557): ‘*The experiences of family members and friends would seem to be very influential in sustaining this cultural view that people should not leave it too late to enjoy retirement.*’ (DWP 531, p.81). Examples of an early demise, or succumbing to poor health in retirement tend to be, understandably, feared and highly **cognitively available**, ‘*... many ... knew someone, or knew someone who knew someone who had not had a decent retirement [representativeness bias] ... despite acknowledgement that statistically we are living longer, many respondents held pessimistic views about life expectancy based on the experiences of those around them.*’ (DWP 531, p.80), this tending to engender a **loss averse** orientation with, arguably, vestiges of a form of **self-other attribution bias**.

We also know that there are social class differences with respect to longevity, with ill-health and an early death being more **cognitively available** as we move down the social structure. Cumulatively, these groups are overrepresented in traditional industry regions (Rowntree, 2007) that will also have the most established historical norms of early withdrawal from work.

There is also evidence of normative influence in terms of life-partner work/retirement behaviour. Drawing on Labour Force Survey (LFS) data, Lissenburgh and Smeaton (2003) report a correlation between exit from work and spouse’s employment status in couples. In the case of traditional male-female couplings, there is said to be an alignment in the timing of retirement, and that this tends to follow the age of the, generally older, male. Corroborative evidence is apparent in the finding that single women tend to work to a later date than married women, although push factors, relating to the need for income, also seem likely to play a role here (Lissenburgh and Smeaton, 2003, cited in DWP 299; see also DWP 531).

While there is evidence that familial expectations and parental behaviour can have significant normative influence on selected date of retirement and there are claims that ‘*... the influence of work mates or even acquaintances on individuals attitudes [can be also] very significant.*’ (DWP 531, p.80), the balance of evidence suggests that employer practices play a more important role, not just in a normative sense regarding date of and trajectory of retirement/EWL arrangements (EHRC, 2010) and attitudes to pensions, but in terms of actively setting financial incentives (DWP 531), e.g.

voluntary redundancy packages. It is known that people are disposed to exhibit bias in favour of a certain gain (Tversky and Kanemann, 1981), particularly where this is framed in the near future, against less certain gain in the distant future (hyperbolic-discounting), i.e. we know people are disposed to take a short-term perspective on retirement and that, relatedly, people tend to exhibit a ‘lump sum’ bias (Gazzale and Walker, 2008).

There are also instances of employers, notably the NHS, seeking to reduce pension liabilities by using nudge type (see Thaler and Sunstein, 2008; Dolan *et al.*, 2010) techniques (by accident or design) in offering (encouraging) staff the choice to select lower Defined Benefit (DB) pension values against higher lump sum payments, i.e. when discounted across a period of approximately 15 years of retirement this equates to a loss to the individual and a gain to the employer.

Worries/concerns

The social construction of retirement has been characterised as period of security and freedom to pursue one’s interests, but for many the reality is underscored by the financial realities and worries over health (DWP 531), i.e. there is notable disjuncture between the ideal and the reality for many.

Not surprisingly, worries and concerns surrounding EWL tend to be referenced to a **loss** rather than a gain **frame**. As the authors of DWP 557 note, it is apparent that much **uncertainty** surrounds retirement, many contemplating it in a negative frame of mind. The range of anxiety inducing **unknowns** relate to income, health status and ultimately, issues of longevity and mortality. More positively, for many, retirement orientations embody expectations and aspirations regarding what to do once time is their own. However, such aspirations tend to be bounded by the perspective that time is short and underscored by varying degrees of trepidation over financing the affair. Many have not calculated how much income they will need when they retire, but most have concerns over whether they will have sufficient (DWP 557; DWP 531). *‘Even for those whose financial situation and health status was not currently a worry, the risks of these things going wrong was a very powerful element of how people felt about retirement.’* (DWP 531, p.80).

A net result of strong orientations around uncertainty and the easily brought to mind (**cognitively available**) spectre of undesired outcomes, e.g. ill-health, limited life expectancy and pension failure, is a strong orientation to the realisation of benefits in the **here and now**.

‘A powerful objection to staying longer in work is that it seems to put to risk the common goal of a healthy, active and fulfilling retirement.’ (DWP 557, p.5). Similarly, *‘The most prevalent reason for intending to retire before SPA was in order to enjoy retirement while still in good health ... [37%] Individuals cannot be certain how long their good health will continue and therefore base decisions, such as early retirement, on the possibility that their health may deteriorate.’* (EHRC, 2010). Fear (**dread**) that they will die or lose their health and miss out is an important factor. *‘Even working up to SPA is often seen to eat into ‘quality’ retirement time.’* (DWP 557, p.5).

Despite widespread recognition of increased longevity, the spectre of ill-health and/or an early demise are vivid images in terms of **cognitive availability**, with almost all individuals having the capacity to bring to mind instances where this has befallen parents, other family members, colleagues or known others. Making people aware of increases in mean life expectancy has little effect on individual beliefs and decision-making, as it offers no personal guarantee. People appear to have no difficulty in recognising that other people are living longer, but this tends to do little to convince them that they will live longer themselves (DWP 531).

It has been suggested that ‘*Whether information campaigns on life expectancy could do anything to shift these [fatalist] orientations remains largely untested.*’ (DWP 557). However, the balance of evidence from the pensions domain and the wider literature on risk (see, for example, Weyman and Kelly, 1999; Weyman and Williamson, 2005), suggests that communications campaigns that stress this point are likely to have a modest impact. As in other risk domains, the public exhibit a strong disposition to focus on the consequences of unwanted events (**dread**), rather than their probability (Royal Society, 1992; Fischhoff, 1995).

It has also been suggested that sabbaticals and unpaid leave may help to reduce the sense of potential loss and prolong preparedness to stay in work (EHRC, 2010). While no known empirical evidence exists on this issue, this type of discounting is not well aligned with insights on decision behaviour.

Confidence in pensions

Issues of confidence are multi-faceted relating to broad-based impressions of the pensions industry, employers and State practice. These are derived from a combination of: mediated accounts and direct personal experience, as well as socially derived **knowledge** of the pensions, experiences of others, notably colleagues, friends and family members (DWP 562).

There is widely cited evidence of an erosion of confidence in pensions (NAPF, 2010; DWP 434; DWP 557; DWP 562). This is ascribed to a combination of a general loss of confidence in financial institutions, following the onset of the financial crisis in 2007/08, media coverage of earlier high profile failures in pensions, e.g. Equitable Life, and ongoing coverage of the State Pension crisis (DWP 438; DWP 562; DWP 528), the planned rises in SPA potentially reinforce this.

There is strong evidence of a widespread belief that pensions are an area of uncertainty (**unknown risk**), extending to cynicism, not surprisingly most acute amongst those who have had bad experiences (DWP 434; DWP 531; DWP 562). **Unknown** in this context should not be interpreted in terms of knowledge deficit, but the belief that future cannot be predicted and **controlled**. Issues of confidence and uncertainty surround not just the date of entitlement but realised pension value (DWP 557).

In many respects, the pensions issue is a risk issue and it seems likely that its current cultural profile reflects some degree of (likely ongoing) **social amplification** (DWP 438; DWP 562), i.e. its profile is one where public perceptions of the degree of crisis/perceived failure is greater than might be justified on the basis of objective assessment. The extent to which this erosion of confidence may inhibit future take-up/motivate opt-out behaviour remains unclear.

The erosion of confidence in pensions adds further uncertainty, to a period of life naturally **framed** with uncertainty, over health and longevity (NAPF, 2010; DWP 531). Uncertainty in this domain has a number of facets including:

- uncertainty over whether pension choices will prove to be sufficient to support retirement ambitions;
- uncertainty over which products to select; and
- uncertainty over future State Pension provision.

Less than a quarter of employees express ‘high’ confidence over ‘how best to save for pensions’, with almost two-thirds reporting that lack confidence over how best to save for their retirement (DWP 434).

In other risk domains, uncertainty has demonstrated the potential to evolve into organised concern, and this remains a possibility. However, at an individual level the more salient effect is the tendency for uncertainty to contribute to disaffection and disengagement. *‘Not knowing how much income to expect in retirement is very unsettling and tends to [further] paralyse already weak impulses to plan ahead.’* (DWP 557).

Issues of uncertainty (more saliently the desire for certainty) have strong intuitive linkages to issues of **trust** (see Section B.5.6), and are potentially important when considered in terms of confidence in sources of information and advice, particularly over pensions.

An SPA of 60/65 years is so deeply culturally engrained, as a life cycle benchmark (DWP 557) that, until the recent changes were announced, constituted part of the unchanging natural order of things: *‘one of life’s certainties’*. It would be unwise to underestimate the potential ripple effect from this change, in terms of its impact on public confidence in pensions (the earlier equalisation of SPA for men and women probably benefited from chiming with perceptions of social equity).

It seems that some have even come to the conclusion that recent changes represent the vanguard of a process of phasing-out the State Pension. *‘These uncertainties were multiplied by widespread doubts that the State Pension would continue at all – or at least at a worthwhile level.’* (DWP 557, p.40). Similarly, *‘Overall there was a sense that the goal posts kept moving and it was quite difficult for the individual to do the right thing.’* (DWP 531, p.84), and; *‘There was widespread cynicism in relation to the Government’s motives for intervention in matters relating to pensions and retirement.’* (DWP 531, p.19).

Only around a third of people have high confidence that their pension will give them sufficient income in retirement (NAPF, 2010b); public sector respondents being overrepresented here. The findings that there are *‘... substantial differences between public and private sector employee confidence in their own employer pensions would both guarantee and deliver a sufficient income [for retirement].’* (DWP 434) may be subject to erosion with the onset of proposed changes to public sector arrangements (The Pensions Bill 2011).

However, other evidence highlights widespread positive orientations to pensions, at least at a conceptual level. Here, as elsewhere, we can detect some disjuncture between what the public believes **should** happen and what they believe **will** happen. It seems that widespread reports of an erosion of public confidence in pensions should not be interpreted as fostering outright rejection of the concept, rather people simply lack confidence in current arrangements. The concern surrounds whether the level of income received will be sufficient. In this regard, levels of confidence are almost universally low (DWP 434).

Perhaps unsurprisingly, preferences for saving in another way (38% DWP 434) e.g. ISAs and investment in property, are most widely reported amongst those with direct experience of poor pension experiences. However, the reported correlation (DWP 434) between alternative investment and the wider belief that **pensions deliver an unguaranteed return** should perhaps be treated with a degree of caution. While this can be interpreted as reflecting a **loss-averse** orientation, it could also embody some (unknown) degree of **attribution bias**, in so far as the expressed belief may be used as a post-hoc justification for not investing in a pension, i.e. lack of confidence in pensions may be used by some as a retrospective justification for non-investment, rather than reflecting a conscious (causal) decision criterion.

Similarly, whilst there is evidence that can be interpreted as suggesting that reduced confidence (**loss aversion**) may inhibit investment in pensions, based on the belief that realised values will be modest, we believe that care should be taken in interpreting findings in this area (see DWP 294), as some of the evidence gathered has sought to elicit rationalisations from respondents for the basis

for non-investment. As such, it is not possible to partial-out elements that reflect **attribution bias** and/or, a desire to reduce **cognitive dissonance**, i.e. rationalising a decision not to invest in pensions on the basis of their modest contribution to retirement income over and above State Pension may reflect a **desire** to reduce **cognitive dissonance** (sense of regret), rather than reflecting the product of deliberative decision-making resulting in detachment, *per se*.

It seems likely that decisions to invest in pensions owe much to the product of what amounts to a **do-nothing option**, in the case of employers' pension schemes, or a tendency to fall back on some, quite likely socially derived, basic heuristic that amounts to '*pensions are either a good (or a poor) thing to invest in*'.

Deferred gratification

The life cycle hypothesis, propagated and taken as a given by many economists, assumes a preference for deferred gratification, i.e. that:

- people are forward looking (**many are not**);
- people can predict the financial resources they will have over their lifetime (**most cannot**);
- people understand the amount they will need to save (**most do not**);
- people make informed choices over financial options (**most are not motivated to do so and find this too complex**);
- modest [subsistence orientated] State Pension values motivate people to seek supplementary income for retirement (**evidence is unclear**);
- maximal utility represents the primary decision criterion (**other effects are salient, e.g. habit, affect and workplace norms**).

In varying degrees, behavioural decision insights and empirical evidence on EWL and pensions counter these core assumptions.

Deferred gratification relates to an orientation where there is perceived benefit from investment (time, effort and/or financial) **today**, in order to reap the benefits **tomorrow**. In essence, it relates to the motivation to invest for the future and impulse control, including pension investment and gains from pensions deferral.

While deferred gratification has been identified as a personality trait, more saliently, from the perspective of the current review, it is also said to operate at a cultural level (see Douglas, 1967). Specifically, sociologists have suggested that deferred gratification operates at the level of a cultural value, that is more commonly encountered in A, B, C1 households. This is said to contrast with working class cultural norms, in particular those of younger people, which are characterised as placing higher value on 'instant gratification', i.e. a preference for reaping benefits in the here and now, or near future (also see Goldthorpe *et al.*, 1968).

It seems that between one-quarter and one-third of adults are more strongly orientated around a preference for funding their current standard of living than saving for the future, i.e. what the authors of DWP 562 refer to as '*myopia*'. Younger people, those with lower incomes and those with lower perceived life expectancies are more likely to prioritise their current standards of living over saving for retirement (DWP 294; DWP 434). It is also the case that large numbers of low paid workers do not have sufficient disposable income to fund a worthwhile personal pension investment. While attitude behaviour disparities might reasonably be expected in this area, it seems that the orientation is not fundamentally hedonistic, as comparatively few (11%) appear to believe saving for retirement to be pointless or that retirement is so far off it is **not worth worrying about** (15%) (DWP 434).

The increasingly salient threat of unemployment, combined with high profile accounts of pensions failure will increase uncertainty for many. It is foreseeable that this may increase the tendency to focus on the near future, uncertainty tending to draw the focus (**cognitive availability (dread)**) towards the potential for loss. *‘The negativity about pensions, the role of the financial institutions and government did not serve to encourage people to consider working longer, but was rather more likely to reinforce the ‘live for the day/today’ attitude, as the future was uncertain.’* (DWP 531, p.119).

The introduction of the default State coordinated personal account pension enrolment arrangements, planned for 2012, is designed to reduce myopia (DWP 562): *‘... the financial incentives of tax relief, investment growth and a mandatory minimum contribution from employers and government equal to that from employees are expected to persuade most of the auto-enrolled who are tempted to opt-out to resist and remain enrolled.’* (DWP 562). The approach reflects ‘nudge’ related behavioural decision-making insights (see, in particular, Thaler and Sunstein, 2008; and Goda and Flaherty, 2010).

The personal accounts scheme is also likely to benefit from the inclusion of tripartite contribution arrangements (State, employer and employee) on grounds of perceived social equity, compared with employee-only contributions (68% take-up versus 13%, respectively, DWP 562) (Gough and Hick, 2009; Pettigrew, 2007; Cleary et al., 2007). The Save More tomorrow (SMarT) initiative in the USA also reflects behavioural decision-making insights, in so far as it makes play of the fact that any sense of loss arising from enhanced contributions as a proportion of annual pay rises is mitigated if it is deducted at source and requires no conscious decision to invest, compared with the alternative.

B.5.3 To what extent does the public actively engage in decision-making over EWL and pension provision, the point(s) in their lives that people contemplate retirement and pensions, and what stimulates this?

Key findings

- Active engagement in decision-making over pensions tends to be a minority activity.
- A significant proportion do not actively engage and would prefer to select default options, e.g. joining their employer’s pension scheme, rather than selecting an alternative.
- The complexity of pension options and uncertainty over realised values tends to foster inertia.
- Despite almost universal recognition and acceptance of the need to make financial provision for retirement, around one-fifth of individuals choose to or have very limited scope to act on this.
- The attitude-behaviour dislocation over pension investment mirrors health and life-style orientations, e.g. while few are unaware of the long-term benefits of smoking cessation, reduced alcohol consumption, dietary change and exercise and often believe these to be desirable many continue to indulge.
- Financial considerations play a role in decisions over the date of retirement but for many people this is not the only, or even the primary, criterion.
- Around a third of individuals prioritise maintaining their current standard of living over their future (retirement) standard of living.
- Around half of individuals feel that they cannot afford to save for retirement.

B.5.3.1 The life course model

In order to grasp the decision-making process over EWL and pension provision it is important to adopt a life course perspective, which recognises that the factors which influence decision-making can change over the course of life and interact with the circumstances under which decisions are taken. The function of pension savings is to redistribute surplus income from the period of working life to the time of scarcity following retirement, a process referred to as ‘income smoothing’. Rational choice theory would suggest that young workers would recognise the value of redistributing their income in this way. However, there are attitudinal and situational factors that can impact upon or defer this decision-making process. As we shall see, the salience of saving for retirement increases as workers get closer to SPA, with the result that decisions about saving for retirement tend to be engaged with at too late a stage in the life course.

If serious retirement planning is deferred until the late 50s or early 60s, then any increase in pension contribution is likely to yield a modest return and is unlikely to redress underinvestment in preceding years. For people in this position, the more viable proposition may be to extend their working life. It is intuitive that those with inadequate pension provision will be the most likely to continue working up to and after SPA.

However, as Philipson, has argued, the period of the life course between 50 and SPA is marked by complex social and demographic changes. Where previous generations may have experienced a mid-life plateau, this part of the life course is increasingly characterised by multiple transitions, not just in work-related roles, but also as carers, family members, consumers, etc. It is suggested that these changes in the social world have given rise to greater diversity and uncertainty in people’s experiences, with impact on their orientation to work: *‘Work-related transitions are certainly one important dimension, but these exist alongside the development of citizenship, consumerism and leisure activities. In the future, people will almost certainly be looking for a balance between these areas, and it seems unlikely that employment alone will take precedence in the organisation of daily life.’* (Philipson and Smith, 2005).

An implication here is that these new demands and opportunities are in tension with the financial imperative to continue working full-time up to and beyond SPA. In response to these changes Philipson argues that a new social contract is required which *‘balances individual and collective responsibilities in the various transitions running through the lives of people in their 50s.’* (Philipson and Smith, 2005). Rather than aiming to extend current patterns of working life across the board, policy-makers should recognise the diverse needs and preferences of the over 50s and put in place policies that facilitate flexibility, choice and security.

The Transitions after 50 research programme offers broadly equivalent conclusions: *‘... a debate around whether people should be retiring earlier or later is misplaced. People in their fifties vary hugely in terms of their work situation, their expectations, their attitudes to work, their financial position, their health and their personal lives. Many difficulties, which they encounter, stem not from an inability to face up to the trade-off between income and leisure in later life, but from a lack of choice and control.’* (Philipson and Smith, 2005).

A key message appears to be that older workers are a diverse group, not least in the degree of choice and control they have over their employment status. The principal implication here is that EWL intervention activity will need to take account of this diversity amongst the over 50s.

A life course perspective on pensions and retirement policy implies the need for tailored interventions to meet the needs of different age cohorts. For younger workers policy might focus on encouraging greater personal pension savings, for older workers the emphasis might be on putting in place policies that will extend choice and control over retirement age, for example by promoting flexible working.

B.5.3.2 Decision-making about pension provision and assets for retirement
(also see Section B.5.2)

Most people appear to recognise the desirability of, and need for, saving for their old age (see, for example, NAPF, 2010). The 2006 National Attitudes to Pensions Survey (NAPS, 2006) found that 60% of respondents thought that the best time to start pension contributions was as soon as one started earning. Over half thought that it was the individual's responsibility to ensure they had sufficient retirement income, rather than the responsibility of Government or their employer (although most also felt that the Government should top up the income of low-income pensioners; also see Gough and Hick, 2009).

However, despite widespread recognition of the need to make financial provision for retirement around a fifth of the working population do not behave as the economic theory on incentives suggests they should (Wicks and Horack, 2009).

Of those who choose not to invest in pensions, reasons cited include direct experience of poor pension investments the experience of known others and mistrust of financial institutions. A more dominant finding is that confidence in the concept of pensions remains robust, with over half of the working population believing that putting money into a pension is the most secure way of saving for retirement. However, the latter perspective is caveated by low confidence that the amounts realised will be sufficient to fund retirement. Two-thirds of home-owners report that they would consider using this equity to fund retirement, usually by moving to a smaller home or cheaper area (NAPS, 2006, 2009).

Although, these elements play a part, there is evidence suggestive of a more fundamental reluctance to defer the gratification of spending income in the short-term in order to benefit from increased income in later life. While differential abilities to make relevant calculations should not be discounted, a potentially more salient factor appears to be a widespread reluctance (29% – NAPS, 2006) to sacrifice current standard of living for future gain, i.e. the desire to enjoy a good quality of life now tends to outweigh anxiety over retirement income. Notably, almost half (49%) of respondents in this survey reported that they could not afford to save for retirement.

Most people appear to recognise that they **should** save for their retirement and that they **should** begin saving early in their working life, but exhibit varying degrees of dislocation between their attitudes and behaviour.

The problem for policy-makers is not primarily one of providing stronger incentives, for example, the evidence suggests that facilitating early access to pension savings as an incentive to save has little effect. Nor is the problem entirely one of knowledge deficit, or attitudinal change, because people know and believe that it is in their interests to save for their retirement; the problem is that despite the incentives they are often incapable of acting in what they know to be their own best interest. In many ways, the attitude-behaviour dislocation over pension investment mirrors orientations surrounding the adoption of healthy lifestyles, e.g. while few are unaware of the long-term benefits of smoking cessation, reduced alcohol consumption, dietary change and exercise, and often believe these to be desirable, many continue to indulge.

B.5.3.3 Barriers to saving

In their review of attitudes towards pensions saving, Wicks and Horack (2009), highlight relationships between structural, attitudinal, informational and behavioural obstacles, see Figure B.1.

The model characterises the complexity of structural variables (pension product options, tax and benefit arrangements) as feeding already low motivations to invest, within a context of mistrust

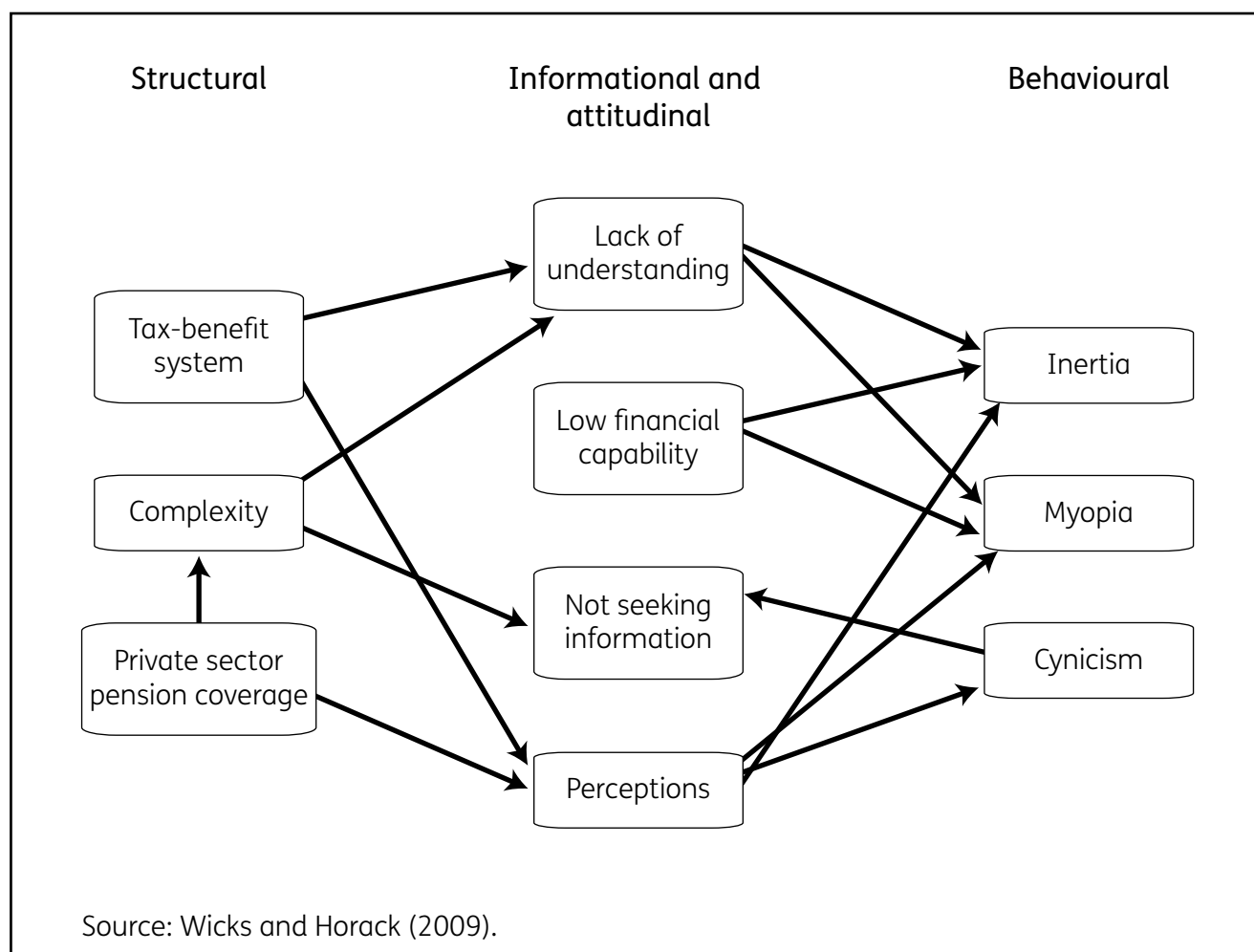
and cynicism over positive outcomes and a predilection for a myopic focus on today rather than tomorrow.

These authors recommend ameliorative policy intervention in the form of individualised guidance on pension investment. This is based on the premise that the solution lies in reducing complexity, so that it is easier for people to calculate their pension needs and develop strategies for meeting them. While there is likely merit in this, the potential impact of such interventions should be considered against the background that:

- very modest proportions of the public appear to actively engage (or could foreseeably be induced to actively engage) with pensions decision-making and retirement planning;
- the scope for reducing complexity is limited;
- outcomes of alternative choices may be inherently unknowable/uncertain;
- too much information may lead to information overload and decision fatigue, possibly to the extend of promoting withdrawal.

The introduction of automatic enrolment in workplace pension schemes (planned for introduction in 2012), may go some way to addressing myopia and inertia effects.

Figure B.1 Links between different barriers to saving



B.5.3.4 Decision-making in work/retirement transition

The previous discussion implicitly assumes that financial considerations are the prime determinant of retirement age, i.e. people retire as early as they can afford to. Indeed, a criticism that can be levelled at much of the research in this domain is that it assumes that individuals are active decision-makers, basing their choices on the principles of parsimony/utility maximisation.

However, ‘... it is unclear regarding the extent to which individuals in their 50s or 60s make detailed financial calculations on the relative merits of working over retiring.’ (Phillipson and Smith, 2005). While financial considerations are likely to play a role, it seems safe to conclude that they are only one consideration, and may not represent the primary consideration. There is strong evidence that an array of individual and contextual variables plays a role in individual and family-unit decision-making over the timing of retirement. However, a key distinction can be drawn between those who are pushed towards retirement through redundancy, ill-health, or caring responsibilities and those who have more choice in the matter.

Further research is required on the decision-making process, especially regarding: the timing of decisions about retirement; the optimum time to influence decisions; identification of who are the key actors who influence decision-making; and the influence of conscious and unconscious motives. As a first step in this process, we have attempted to model some of the variables that impact on decision-making over retirement (see Sections B.5.4 and B.6).

B.5.4 Which variables impact on decision-making over how and when to retire, including normative influences and social references?

Key findings

- Key push and pull influences on retirement behaviour include: individual (health and psycho-social), financial, family commitments, peer retirement norms, job characteristics (satisfaction, working hours; employer attitudes/norms) and structural influences (availability of work; State benefit arrangements).
- Social differences, relating to social grade/class appear to constitute a primary influence on EWL and pensions behaviour. It has such a strong relationship to having a pension or not; size of pension, employment opportunities, access to flexible work and more.
- Suffering debilitating ill-health is the most salient individual-based determinant of early retirement and disproportionately impacts on the semi-/unskilled.
- Robust evidence of social networks and sub-cultures based on locale constituting strong normative influences on the date of retirement is lacking.

B.5.4.1 Push and pull factors

The transition from work to retirement is ultimately a volitional act. The SPA may be fixed by statute and until recently employers may have had the right to retire employees when they reach that age, but ultimately, it has always been down to the individual to decide whether they accept the status of retirement or continue to seek paid employment. However, although individuals must decide when to retire, rarely do they make that decision under conditions that are wholly of their own choosing. The literature suggests that there are multiple factors that influence the age at which people retire:

- **individual factors** – physical and mental health, psychological dispositions, attitudes/beliefs, and knowledge of pensions and retirement options;
- **financial factors** – pension value, other savings and financial obligations, for example, financial support for children;
- **family and social network factors** – caring responsibilities, retirement date of partner and reference group retirement norms;
- **workplace factors** – job quality, opportunities for flexible working, and employers' attitudes;
- **structural and economic factors** – enforced redundancy, decline of traditional industries, changes to State benefits.

Social status is considered a key socio-demographic factor because it has such a strong relationship to having an occupational or private pension or not; size of pension income, employment opportunities, access to flexible work and more.

In Figure B.2 we have attempted to draw together insights to produce a hypothetical model of the impact of the factors outlined already on three primary socio-economic groupings: high income professionals, middle income groups and low-skilled, low-income workers. The model is discussed below, but first we will introduce and articulate the constituent variables

B.5.4.2 Health status

Suffering long-term debilitating ill-health represents the most salient individual factor as a determinant of early retirement. Lower income groups exhibit proportionally higher rates of debilitating ill-health (MacInnes *et al.*, 2009), in part due to workplace exposures, but also due to broader cultural/lifestyle effects.

There is strong evidence that employers could do more to enable employees with health problems to stay in work (Black, 2008). Employee perspectives appear to reflect this. Around two-thirds of those, who rate their health fair or poor, claim that their employer is insufficiently sensitive to their health needs. Additionally, around a third of those who report ill-health claim to be inhibited from making their employer aware of this for fear of discrimination (particularly for mental health issues). Both phenomena increase the potential for migration to chronic ill-health status. There is also evidence of socio-cultural differences in health status and perceived capacity to work (EHRC, 2010).

B.5.4.3 Financial factors

Insufficient pension income, coupled with ongoing financial obligations such as a mortgage or dependent children, have the potential to operate as push factors. Possessing sufficient retirement income permits greater flexibility in making trade-offs between the intrinsic and extrinsic benefits of work and leisure. Those in low-skilled, low-income jobs are more likely to encounter financial disincentives to returning to work, e.g. after illness, redundancy or retirement, including low wage income and loss of benefits.

B.5.4.4 Familial and social network factors

Those who are married or divorced are more likely to stay in work than those who are single or widowed, although there is evidence of gender differences, single women appearing to be relatively more disposed to EWL. Caring for children or adults is common amongst those aged 50-55 (39%) and disproportionately impacts on women. The need to provide care for others can push people out of employment, but may also operate as a financial incentive to stay at work (EHRC, 2010).

Harder to quantify is the influence of social norms about retirement age. These may be mediated through the family or broader social networks. However, there is evidence that couples seek to align their retirement date referenced to the elder partner (Lissenburgh and Smeaton, 2003). Despite intuitive appeal, there appears to be little beyond speculation regarding the extent to which social networks and sub-cultures based on locale constitute strong normative influences on the date of retirement.

B.5.4.5 Workplace factors

Workplace factors relate to the nature of work, the design of work and the social context of work. Where employees find work intrinsically rewarding, disposition to EWL might reasonably be predicted to be higher, or perhaps more succinctly, disposition to retire early moderated. By extension, where extrinsic variables, such as camaraderie and social support are strong, this may make work more attractive. Where work is not intrinsically engaging, with low social support, with high physical and psychological demands, or anti-social hours it is, unsurprisingly, less attractive to most people.

A number of authors cite an increased intensification of work in recent decades as a causal influence in the incidence of work-related stress (see, for example, Philipson and Smith, 2005). Other sources paint a more complex picture of the stress epidemic (see Cox, 1993). However, what is apparent is that large numbers of the over 50s cite work-intensification-stress as an important criterion in their decision to withdraw from employment. A third of those who rate their work as ‘high stress’ report planning to retire before SPA compared with a 20% average (Philipson and Smith, 2005).

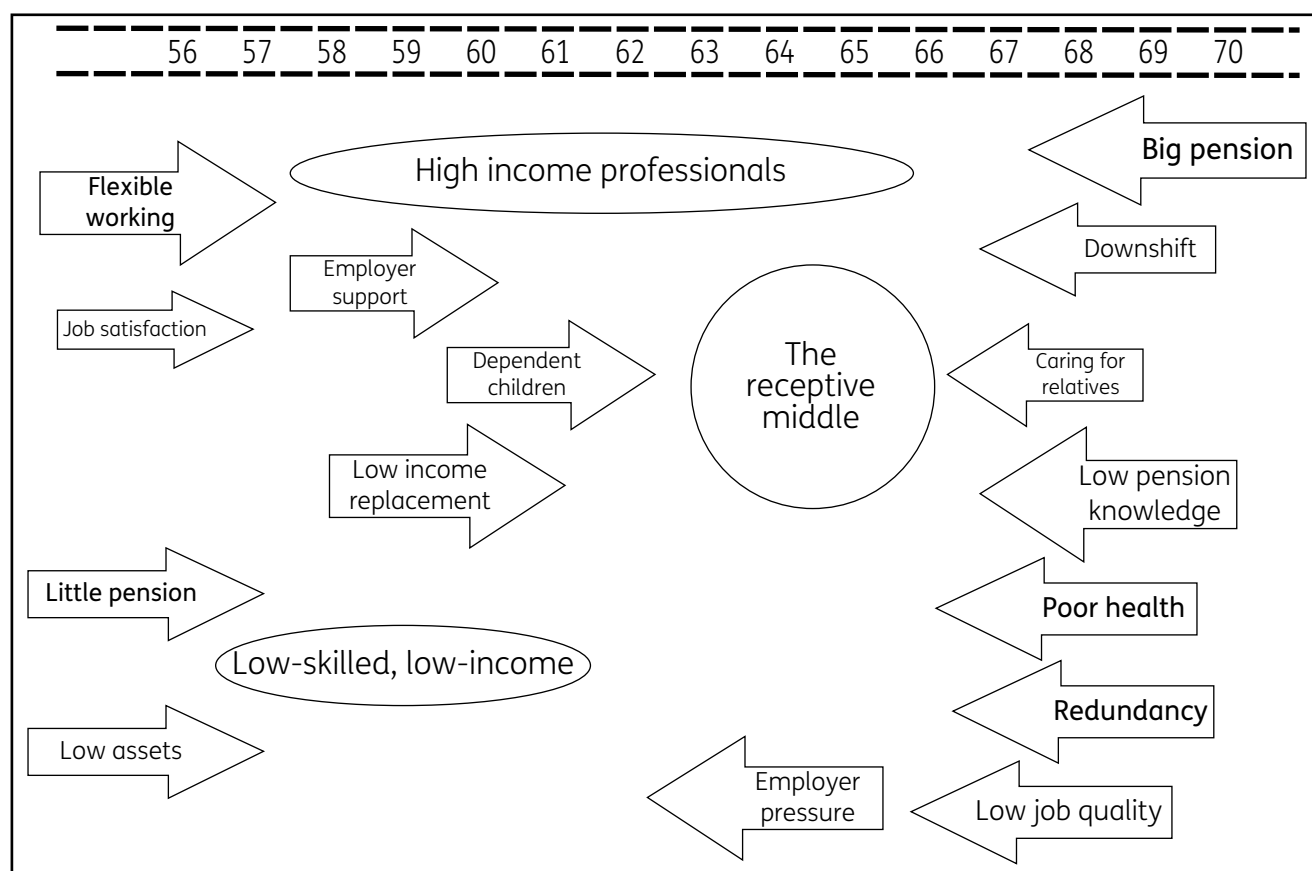
B.5.4.6 Structural and economic factors

Citing the experience of the 1980s and early 1990s, Phillipson and Smith (2005) note that there has been a tendency amongst employers to treat older workers as a reserve army of labour, with employment opportunities tending to reflect fluctuations in the wider demand for labour. Such effects are likely to be more pronounced amongst the low-skilled. However, sector-based differences are foreseeable, i.e. demand is likely to be higher in areas where there are skills shortages.

B.5.4.7 Modelling relationships

Social differences, relating to social grade/class appear to constitute a primary influence on EWL and pensions behaviour. While not wishing to underplay the degree of social complexity here, Figure B.2 and Table B.1 represent an attempt to characterise/typify the profiles of salient variables referenced to three broad social banding's.

Figure B.2 Characterisation of relative salience of variables by social status



Within the model constituent variables, their relative salience and their socio-demographic relevance have been derived from an assimilation of qualitative and quantitative evidence.

Interpretation of Figure B.2

- The header rail denotes age of retirement.
- Three socio-economic groups are characterised as: high income professionals (A and B)⁴⁴, middle income managerial/white collar (C1 and C2) and low/unskilled (D and C). Each social group ellipse embodies the range of incomes (X axis) and range of retirement ages (Y axis).
- The arrows represent factors impacting on age of retirement. Their relative size indicates relative impact. Where factors are salient to more than one socio-economic group, the arrow is placed closest to the most affected groups, e.g. poor health is most salient to lower income groups doing routine work.

High income groups are characterisable as the most strongly attitudinally disposed to EWL (see DWP 531), with the most opportunities for employment, greatest choice over the configuration of work and the point of withdrawal. They are also likely to impose the lightest load on State finances in retirement.

The low-skilled arguably have the strongest financial incentive to EWL, but also experience the strongest push to retire at, or before, SPA e.g. due to ill-health, redundancy, restricted scope for flexible work. Members of this group have the least volition (choice or control) over the point and manner of retirement and tend to be the least intrinsically engaged with, and motivated by, the work experience.

⁴⁴ NRS social grades – www.ipsos-mori.com (July 2009).

Table B.1 Characterisation of primary social contrasts

	Retirement push factors	EWL pull factors
High income professionals	Generous pension and liquid assets	High intrinsic job satisfaction Strong market demand for skills Strong flexible working options Good health Choice
Middle income Managerial/white collar and skilled	Redundancy Job stress Care of dependants	Modest flexible working options Modest pension or liquid assets Financial support for offspring
Low-skilled	Poor health Redundancy Low job quality Low intrinsic job satisfaction Low market demand for skills Few flexible working options Low choice Low control Low pay Care of dependants	Little/no pension or liquid assets

For the **middle** strata, the factors driving them to retire early are considered to be relatively weaker than for the low/unskilled group. Poor health, in particular job stress, can operate as a push factor, but diminished physiological capacity is likely to be less important than for those in traditional manual employment. A high proportion is also present within the public sector where there are currently more opportunities for flexible working (CIPD 2007). The majority are likely to have some, modest, established pension provision and be culturally orientated around deferred gratification (**saving for tomorrow**). But their pension values are unlikely to be sufficient to support volitional retirement much before SPA. The push from **caring responsibilities** can be predicted to be less than for the semi-/unskilled due to greater opportunity for flexible working and/or income levels sufficient to buy care services.

We deduce that these factors will conspire to afford this middle group a relatively narrow band of retirement ages, clustering around SPA or a couple of years below. Despite this narrow range, we also predict that this group will have a degree of control over precisely when and how they retire.

While the model we advance remains hypothetical/theoretical, it is rooted in our synthesis of the evidence base and we believe that it offers utility in terms of policy thinking over a segmented approach to intervention.

However, caveats surround potential limitations of the evidence base. This is a composite of qualitative and quantitative evidence and questions might reasonably be raised over the representativeness of some samples. In addition, the quantitative evidence tends to be limited to univariate analyses and prevalence rates, e.g. opportunities for flexible working. At a more fundamental level, we run into the limitations of attitudinal data, referenced to previous and/or future behaviour, e.g. *‘do you think you would retire later if you had the opportunity to work flexibly?’*.

In Section B.6 we report findings from our attempts to apply multiple regression modelling to the ELSA data set, in order to answer some of these questions. Unfortunately, this type of analysis asks a great deal of the data set, so it has not been possible to quantify or test all of the relationships posited in our hypothetical model. Where gaps remain these are identified and may provide agenda for future research.

B.5.5 What is the nature of any information needs, knowledge gaps and misunderstandings with respect to retirement and pensions?

Key findings

- Most people react to options for EWL rather than actively seeking them out.
- For the minority who actively seek EWL it is particularly important that they are able to grasp salient facts, and that misunderstandings are addressed.
- Many people's concept of EWL reflects simple heuristic inference, it is important that these heuristics are appropriate and substantially correct.
- Plugging knowledge gaps is relatively straightforward in communication terms but the net result is that people are better informed. There is no guarantee that they will make better choices.
- Enhanced knowledge is one of an array of variables impacting on attitudes and behaviour in relation to work. In most instances structural and (workplace) climate influences play a more pervasive role.
- The idea of phased retirement is unfamiliar to many and there is limited understanding of the options or their implications.
- Cultural precedents for EWL are only present in a limited range of employment sectors.
- Flexible working pre- and post-SPA is attractive to many, but people have limited knowledge of the range of potential configurations and how post-SPA income interacts with private/employer/State pensions and other benefits.
- Many people experience difficulty in estimating how much income they will need to support them in retirement, but there is recognition that State Pension values represent a subsistence income.
- People are able to make substantially accurate estimates of State Pension values.
- Levels of awareness and understanding, the financial implications associated with options over early draw-down/deferral of pensions.
- There is fairly strong evidence of a preference for individually tailored, bespoke, pension forecast over generic information.
- The impact of complexity over pensions and EWL increases the probability of people making poor pension choices, blunts their motivation to actively engage in decision-making, and contributes to public uncertainty and a sense of helplessness over planning for later working life and retirement.
- Knowledge of pension matters is low; only one in 20 rate their knowledge as 'good'; and one in four claim to possess little or no knowledge. Confidence in how best to save for pensions is also low (one in 54 individuals).
- Most people's knowledge of EWL and pensions policies is limited to headlines like '*state pension age is going up*', combined with a belief that goal posts are prone to move around in this area.

B.5.5.1 The limits of an education deficit perspective

Before proceeding with this section it is necessary to define its boundaries and to reflect upon the context of public information needs, knowledge gaps and misunderstandings. First and foremost, there is an implicit assumption that decision-making over retirement and pensions is the product of rational, contemplative activity that broadly equates to some form of, at least quasi, cost-benefit analysis. The overwhelming evidence is that by far the majority of individuals do not engage with EWL and pensions issues in this way. *‘... few people use information gathering routinely or systematically as a starting point for planning and decision-making – certainly [not] in relation to broad topics like extending working life, which is an amorphous topic that people typically have little motivation to explore.’* (DWP 557).

Seemingly due to some combination of subject matter complexity, the distal nature of the consequences; or simple preference for more attractive and less tedious ways to spend their time (Gough and Hick referred to in DWP 562; DWP 299; DWP 557), it is apparent that most people are not disposed to actively engage in planning for later working life and retirement. Thus, while it is frequently easy to demonstrate gaps in knowledge, this is of limited value, when considered against a default orientation of under-engagement. *‘... the public do not usually have a clear focus on issues like these and haven’t flagged them mentally as things that they need to find out about.’* (DWP 557, p.100). For most people, levels of engagement equate to ‘going with the flow’, reacting to circumstances as they arise (DWP 557) and hoping that ‘things will work out’ – somehow. There is ample evidence that for most the level of engagement, at best, is such that they fall back on simple heuristics, affective intuitions, habit and social normative effects (see Section B.5.6).

That said, while it seems to be a minority activity, some individuals do actively engage/attempt to engage with the details surrounding options over EWL, retirement and pensions. For these individuals in particular, it is important that they are able to grasp salient facts, and that their misunderstandings are addressed. To a lesser degree, for the wider group that exhibit a propensity for recourse to simple heuristics, it is important that these heuristics are appropriate and substantially correct. For these reasons there is merit in identifying and understanding gaps in the public’s mental models and using this insight to tailor communication material to reinforce appropriate knowledge and correct misunderstandings (Morgan *et al.*, 2002).

It is also important that we do not assume too much from addressing education deficits. Plugging knowledge gaps and demystifying complex material is a relatively straightforward activity in communication terms. The net result, assuming people are motivated to attend to the information provided, is that they are informed, to the extent that they have **the potential** to make better choices. This tends to have a modest impact on their motivation to make appropriate choices, particularly if options and/or the process of selecting them is viewed as unattractive. *‘There exists a broad literature on both perceptions [knowledge and beliefs and attitudes] and actual savings [behaviour]. There is however very little compelling evidence on the inter-working of the two and where there is evidence it reveals contradictions.’* (DWP 562; also see DWP 434).

Improving knowledge and understanding can have an impact on employee attitudes and behaviour in relation to work. However, in most instances structural and (workplace) social climate influences play a more dominant role (see Warr, 1980; Hale and Glendon, 1987).

B.5.5.2 Knowledge gaps and misunderstandings

Financial literacy

Evidence of low levels of knowledge and understanding of pension arrangements, investment options and the ability to manipulate salient variables has led to calls to increase public literacy in this area. ‘... *most had only a relatively superficial grasp of how things work – and a small number appear to have scarcely any understanding at all.*’ (DWP 492).

There is transparent frustration amongst policy-makers (DWP 557) that people do not seek out information, linked with a desire to ‘*make them more rational*’. From this perspective, it is perhaps tempting to conclude that the solution lies in developing more sophisticated education initiatives that not only inform but motivate action (DWP 562). The basic premise here can be characterised as ‘... *if we make the information easier for people to comprehend, equip them with the necessary knowledge to make decisions they will be more motivated to engage and make better (more rational) decisions.*’ (after Fischhoff, 1995).

Differences in pension literacy have been reported by education level. While those possessing only basic literacy skills are likely to experience the most difficulty, it seems that many educated to degree level and above also experience problems. As the authors of DWP 562 report, 62% of respondents educated to degree level rated pension information as **too complicated**, compared with 80% of others.

Findings on the role of education and financial literacy and communication are contradictory, but pension options are likely to remain complicated (DWP 563). The impact of educational interventions, to date, appears to be modest. This mirrors the degree of impact of public risk-education initiatives in other public policy domains. Moreover, claims of spill-over effects (DWP 562) from individuals who engage in education on pensions via their subsequent interaction with (education of) others within their social network, do not appear to be well substantiated and are judged to be somewhat optimistic.

Where attempts have been made, under experimental conditions, to demystify and simplify decision options over planning retirement income, many individuals still find it difficult to consider and manipulate the number of relevant variables (DWP 557). Too much information and too many variables to manipulate results in overload. What people are seeking is clarity, simplicity and certainty (DWP 562).

Initiatives aimed at increasing the clarity and personal relevance of information, its pertinence to individuals and the timeliness of its arrival offers promise, but pension options are likely to remain complicated (DWP 562).

Flexible working

It is apparent that most people view retirement as a cliff edge (DWP 557). The concept of **phased retirement** is unfamiliar to many, and there is limited understanding of the options or their implications (DWP 557).

Part of the reason for the limited insight in this area seems to be attributable to the traditional orientations of many employers and few precedents within the workplace, combined with wider social references and established work/retirement norms.

The concept of flexible working in the run-up to and post-SPA is attractive to many (see, for example, McNair, 2010). However, it seems that people have limited knowledge of the range of potential configurations and options or how the income they receive (post SPA) will interact with

private/employer/State pensions and other benefits. There are claims that employers provide little information in this area, even at the most fundamental level ‘... *people didn’t know whether gradual retirement was available to them or not.*’ (DWP 531, p.75). The EHRC reports 38% of men and 46% of women being unaware of their right to request flexible working hours (EHRC, 2010).

Tax and benefits system

Paralleling the general picture on EWL and pensions, understandings of tax and benefits implications are, for most people, vague and impressionistic, e.g. there is widespread confusion over whether personal pensions investment will have a negative impact on means-tested state benefits (DWP 562). Similarly, it has been found that, ‘*There was a perception across all groups, but most strongly in the non-savers group, that having savings of investments reduces your entitlement to State Benefits ...*’ (DWP 562).

The latter appears to be corroborated by evidence that two-fifths of individuals are unable to quote any of the tax rules in relation to pensions (NAPS, 2009). However, more positively around two-thirds know (or correctly guessed) that personal/employer pension was taxable and around half that private pensions qualify for tax relief (NAPS 2009). There is also notable confusion over how State and personal provision mesh, in terms of implication for personal pension income (DWP 294).

With respect to EWL there is evidence of a widespread presumption that any income earned post-SPA would be ‘... *all whacked in tax...*’ (DWP 557); and that benefits would be reduced to the extent that people would be worse off financially if they went to work (DWP 531). There appears to be limited awareness of tax breaks for those over SPA (DWP 557), or of the potential gains from pension deferral (DWP 434; DWP 557). However, there is evidence of socio-demographic differences, with those from professional and managerial groups tending to have a more detailed appreciation of the tax and income implications. By inference, this may reflect higher rates of engagement with professional financial advice (DWP 562).

There is considerable debate over the extent to which tax relief impacts on pension investment behaviour (see Blundell *et al.*, 2006; DWP 294). Some authors cast the impact as minimal (DWP 434), while others claim it to be the strongest influence (DWP 562). However, the balance of evidence seems to be that economists tend to overstate the case, i.e. for large swathes of the population tax incentives have a modest impact relative to other variables.

There is a degree of contradiction in the perspective, particularly popular amongst economists, that people are irrational and the belief that (knowledge of) tax breaks will motivate investment behaviour, or by extension, that **unhelpful** aspects of the tax system operate as a disincentive.

A balanced conclusion might be that tax relief has a positive impact on the behaviours of some and not others (DWP 562) and that lack of knowledge and understanding of tax relief and how it works represents a potential barrier.

Estimating retirement income

Many people experience difficulty in estimating how much income they will need to support them in retirement, but there is recognition that State Pension values represent a subsistence income (Nesbitt and Neary, 2001; Gough and Hick referred to in DWP 562) combined with widespread misgivings over whether what they will have in total will be sufficient (DWP 557). There are suggestions that ‘*Not knowing how much income to expect in retirement is very unsettling and also tend to [further] paralyse already weak impulses to plan ahead.*’ (DWP 557).

With respect to knowledge of likely pension values, there is evidence that many people have ‘... a poor grasp of their likely entitlement, misgivings about what they will get, [and] limited understanding of how things work ...’ (DWP 557, p.2; see, also DWP 492). Similarly, Mayhew (2002) reports that 43% of those within ten years of SPA had only a vague or no idea of what their retirement income would be (also see Vickerstaff *et al.*, 2004). There is also evidence that people tend to overestimate the amount they will receive from defined contribution (DC) pensions (DWP 515).

More positively, there is a global finding that people are able to make substantially accurate estimates of State Pension values (DWP 562; NAPS 2006). However, there are also grounds for concluding that this may underplay sectional differences. For example, a recent study of the estimates made by ethnic minorities reports that only around half were able to accurately estimate State Pension values (+/-£20) (Gough and Hick, 2009).

There appears to be limited awareness and understanding of the financial implications associated with options over early and deferred draw-down of pensions, or drawing pension while EWL and metrics of variability, depending on the selected age of retirement (DWP 557). It seems that many simply assume that pensions will be paid at SPA. So the question ‘*When should I start drawing my pension*’ tends not to be salient. However, many draw the intuitive conclusion that they will lose income (DWP 557).

Providing people with information in a simple intuitive format that demonstrates the impact of alternative dates of retirement on pension income appears to offer a useful anchoring effect (see Section B.5.6). However, while this has a positive impact on understanding (DWP 557), it is less clear how persuasive this is in making EWL more attractive than retirement.

There is fairly strong evidence of a preference for individually tailored, bespoke, pension forecast information, over generic information (DWP 557; DWP 562). However, it also seems that people approach the results of personal forecasts with some apprehension, which may go some way towards explaining the low levels of take up reported (DWP 557) in pension estimate interventions. Mirroring expedience of relatively low take-up rates for well-man clinics, HIV testing, and the like, within the public health domain, people tend to be averse to the possibility of bad news.

Widespread evidence of the complexity of information relating to pensions leading to poor decisions and, more commonly, a retreat from engagement, has led some to infer that there is much to be gained from finding ways to present salient information in simple more intuitive forms. It is likely that there is considerable scope for this, however, the inherent complexity of current arrangements represents the most significant barrier and rationalisation in this domain would foreseeably yield more significant effects. But the scope for this is generally held to be modest (DWP 562).

The impact of complexity is essentially three-fold:

- it increases the probability of people making poor pension choices;
- it is held to blunt (already weak) motivation to actively engage in decision-making;
- it contributes to public uncertainty and a sense of helplessness over planning for later working life and retirement.

These issues are most salient for those who need/chose to make their own pension provision. ‘*Private pensions are considered to be both risky and confusing The majority claimed they lacked confidence in their ability to make decisions about pensions.*’ (DWP 562, p.18). However, those who participate in employer pension schemes are still periodically faced with having to make choices where the impact of options can be less than transparent.

Confidence

The level of self-rated knowledge of pension matters is low. It seems that only around one in 20 rate their knowledge as ‘good’; and one in four claim to possess little or no knowledge. Confidence in how best to save for pensions is also low, again at around one in 54 individuals (NAPS, 2006).

Those who are investing in/are in receipt of a private pension tend to be more confident that they have ‘good’ or ‘reasonable’ knowledge, however, the direction of causality is unclear, i.e. *‘It’s not clear whether better-informed people chose to take out private pensions or if joining a private pension served as a means of gaining information about pensions.’* (NAPS, p.57) and both could be the case.

There is also evidence of socio-demographic differences, with 56% of graduates reporting low confidence, compared with 97% of social housing tenants (NAPS, 2006).

Knowledge of policies and resources

For most people knowledge of EWL and pensions policies is vague and impressionistic and limited to headline-line conceptions of the type *‘state pension age is going up, similarly, the belief that goal posts are prone to move around in this area.’* (DWP 557).

Levels of awareness and, consummately use, of information resources and websites that offer information on EWL and retirement are low. The available evidence suggests that this should not be interpreted as principally an IT literacy problem, but reflects a dominant orientation of low motivation to actively seek out information on these issues. Tellingly, the authors of DWP 557 report that none of their respondents had heard of AGE Positive and its website.

B.5.5.3 Demographic differences

In Section B.5.4 we reviewed the principal factors that impact upon retirement decisions. Our provisional conclusion was that choice and control over the manner and age of retirement varies by socio-economic group, with high income professionals having greatest choice and opportunity and low-skilled, low paid workers the least. We also know that the low-skilled tend to be less intrinsically motivated by work, placing a high value on early withdrawal.

In short, interventions to remedy the knowledge deficit over pensions and EWL are likely to have very limited impact on low-skilled low paid workers unless they are accompanied by more radical interventions that would widen individual choice and control over retirement age. Knowledge deficit (education) interventions might be predicted to be more effective among high income groups, but arguably their need is least. There may be a case for focusing knowledge base interventions on the social strata(s) between these extremes, on the grounds that a significant proportion of this group are likely to benefit from options for flexible working; will have established (modest) pension provision and are likely to be in stable employment.

B.5.6 Orientations to sources of information and advice over extending working life, retirement and pensions?

Key findings

- Trust in stakeholders is typically vague and impressionistic, but referenced to broader inferences regarding perceptions of vested interest.
- Trust is best conceptualised as multi-faceted rather than as a simple invariant ‘commodity’ or rating that is universally attributed to an organisation, profession or other social group.

- Stakeholder public trust profiles tend not to be uni-dimensional, but interact with the issue under consideration.
- Trust in Government (Ministers) over EWL is low. There are differences in the trust profiles of government (State) Departments and Agencies, and in the degree of perceived separation from Government, and this is prone to vary with the issue under consideration.
- Stakeholders' trust profile may vary in systematic ways between different social groups, e.g. by social class, gender, ethnicity.
- The recently announced rise in SPA appears to have contributed to the low trust profile of g/ Government.
- DWP is a trusted source for information on State Pension values, but is seen as partisan and close to Government on EWL.
- Jobcentre Plus has a poor trust profile.
- Trust in financial institutions appears to be eroded due to high profile examples of pension's failure and their role within the current economic crisis.
- Reports of high trust in independent financial advisers seem likely to reflect the absence of bad news and to be based on positive association's with the word 'independent', rather than referenced to direct experience of performance.
- An array of organisations have positive trust profiles, principally third sector organisations, but do not possess intuitive associations with extending working life or pensions issues.
- Trust in the concept of pensions appears to be resilient. However, there is low trust (confidence) that pensions will realise hoped for values.

4.6.1 *Communication beyond knowledge gaps*

As the authors of DWP 557 recognise, underpinning knowledge deficit elements lie broader orientation influences, relating to perceptions of message sources⁴⁵, often impressionistic and affective in nature, yet pervasive, with the capacity to neuter the impact of even the most robustly designed message content, i.e. controversial issues tend to require attention to macro level elements of the communication process (see Figure B.3).

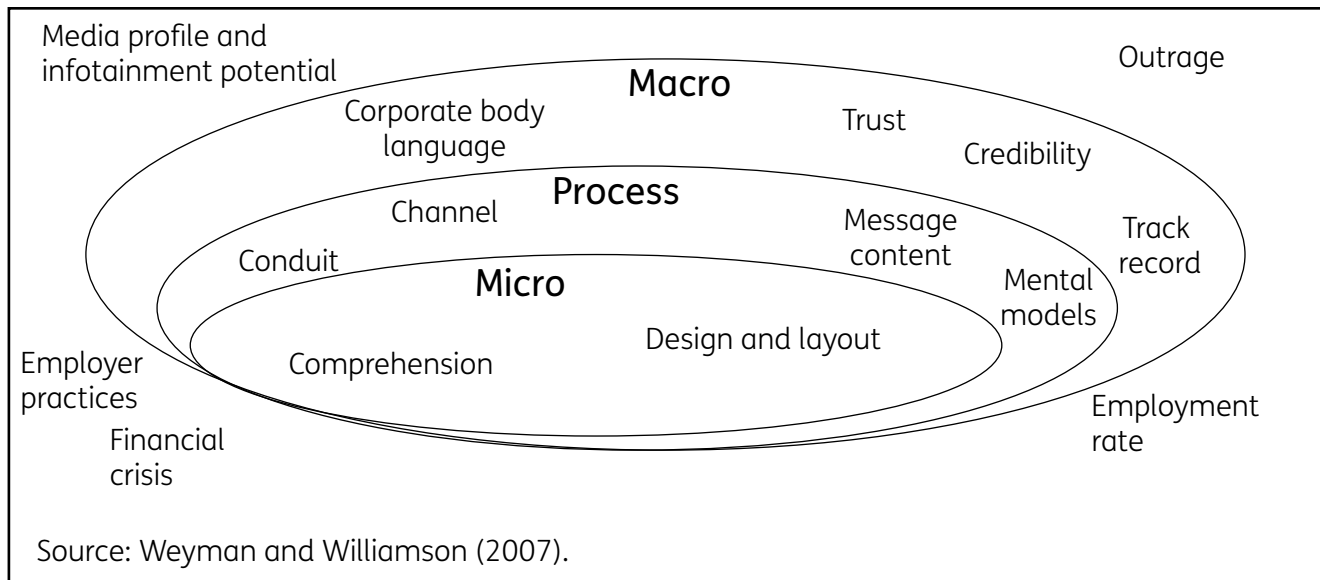
When attempting to influence public behaviour, communication interventions tend to represent the default policy option. Explicitly, or implicitly, this tends to be founded on the belief that there are gaps in public knowledge that need to be filled, i.e. an education-deficit perspective (see Pidgeon et al., 2003b).

The amassed evidence on EWL and pensions highlights an array of areas in which there are gaps and errors in public understanding. However, the reader is cautioned against concluding that addressing these is simply a technical matter of de-constructing, simplifying and distilling complex concepts into a more accessible and readily digestible format. Although these aspects are important and benefit from extensive research insight, by volume (see, for example Covello, 2004, 2007), effective communication rests upon more than 'telling people what you want them to know', rather it embodies tailoring content to complement what they already know/want to know (including misunderstandings), their preferences/established behaviour in terms of communication channel

⁴⁵ A broad conception of 'message source' should be inferred here – that extends beyond media based communication to encompass broader aspects relating to implicit messages inferred from corporate body language and behaviour.

and, critically in the case of controversial issues, aspects relating to macro level impressionistic and affective orientations, in particular those relating to trust in, and credibility of, the message source (see Fischhoff, 1995; Pidgeon *et al.*, 2003a).

Figure B.3 Concentric model of communication



Issues of professional/institutional trust come into sharp relief where there is significant underlying public concern and suspicion over the motives of stakeholders. As noted elsewhere, at one level trust can be viewed as operating as a cognitive filter, in essence, an **anchoring** effect, whereby information received is processed and its credibility referenced to a priori beliefs surrounding the competence and motives of the source. In extremis, where trust is seriously eroded, the cultural profile of the source may be such that people shrink from engagement, to the extent of disregarding the information it produces. In short, if a source's trust profile is seriously eroded, efforts expended on honing message content are very unlikely to reap proportionate benefits. In such circumstances, resolution may lie in finding suitable conduits and trusted surrogates to deliver messages.

B.5.6.2 Trust in stakeholders

In communication terms, issues of **trust**, **institutional credibility** and **outrage** are generally regarded as orientating (or macro level) influences that can impact on how the public perceive and react to stakeholders, in the current instance, principally, Government, its departments/agencies; employers; and pensions providers (see Pidgeon *et al.*, 2003a; Pidgeon, *et al.* 2003b; Breakwell, 2007).

Information and advice from, and public preparedness to engage with, these stakeholders **can** be referenced to the individual's previous experience of engagement, the experiences of **trusted-others** (family, friends or colleagues, etc.) and media accounts. Each of the relevant stakeholders is likely to enjoy an established trust profile, however:

- this will typically be based on rather vague and impressionistic intuitive understandings (Petts, 1998; Pidgeon *et al.*, 2003a);
- this tends to be referenced to the social legitimacy of the stakeholders' role rather than knowledge of their activity (particularly for departments and agencies of the State) (Pidgeon *et al.*, 2003a);

- even key words in the title of the profession or organisation can have an impact, e.g. there tend to be positive associations with words like health, independent, standards (see Petts, 1998; Pidgeon *et al.*, 2003a; Weyman and Williamson, 2007);
- the profile is unlikely to be unified and unvarying, in so far as a stakeholder may be trusted for information of type ‘A’, but not for information of type ‘B’ (Petts, 1998; Pidgeon *et al.*, 2003a);
- the profile may be subject to erosion by external events. There is evidence that a positive/neutral profile may owe more to the absence of bad news than any public belief in prowess Pidgeon *et al.*, 2003a, 2003b);
- a stakeholder’s trust profile may vary in systematic ways between different social groups, e.g. by social class, gender or ethnicity (Pidgeon *et al.*, 2003a); by locale (Wynne, 1989; Weyman and Williamson, 2007).

There is strong evidence from a range of risk domains that, for high profile/high consequence issues public perceptions **can** be referenced to variables drawn from beyond the presenting issue (Slovic, 1993; King *et al.*, 2005) e.g. post-2008 perceptions of pensions may be referenced by wider perspectives of a financial sector in crisis (DWP 438; DWP 562; DWP 528).

There is an emerging consensus that trust is best conceptualised as multi-faceted rather than as a simple ‘commodity’ or rating that is universally attributed to an organisation, profession or other social group. Institutional trust profiles are potentially dynamic and dependent upon a range of contextual/societal influences, with the relative salience ascribed to these also potentially culturally variable, i.e. levels of trust vested in institutions and professionals can, in some instances reflect a complex interplay between the stakeholder and the issue under consideration.

Public perceptions of stakeholders are routinely vague, impressionistic, and frequently mediated, rather than being based on direct experience or the product of systematic investigation and informed deliberation. The public(s) routinely apply a range of **heuristics** in their assessments of trust, e.g. ‘*the profit-motive undermines public well-being*’; ‘*the government should hold them accountable*’. Core variables contributing to public trust include: openness; competence; objectivity/bias; fairness; consistency; independence and altruism (see Pidgeon *et al.*, 2003a). Beyond these lie more subtle, but potentially no less important, nuanced understandings of the actions of organisations, equating to what has been termed ‘*corporate body language*’ (Horlick-Jones – personal communication). It should also be kept in mind that the set of variables identified as eroding/undermining trust are not simply the antonyms of those found to engender it (Pidgeon *et al.*, 2003a; DWP 528).

Of particular relevance to this review are findings relating to levels of trust vested in ‘Government’; almost universally found to be low in all studies, with some authors claiming a progressive erosion over the post-war period (Petts, 1998); although empirical evidence is absent on this issue.

With one or two notable exceptions, e.g. DWP 557, the EWL/pension evidence base lacks sophistication in this area, in so far as reference to g/Government routinely fails to differentiate between the profiles of elected officials (Government) and the institutions of State (government). There is established evidence of scope for viability in these profiles from other domains (Petts, 1998; Hunt *et al.*, 1999; Pidgeon *et al.*, 2003a), i.e. profiles reflecting varying degrees of separation from elected officials and differences in profile between governmental bodies.

Other noteworthy contrasts surrounded the public’s distinction between the Government of the day pursuing its policy agendas (which tend to be viewed as partisan) and government as a regulator (which is generally viewed as acting **in the public interest**). The public(s) also tend to exhibit, frequently strong, beliefs about how elected Government officials **should behave**, and the role of

government, referenced to a critical perspective on how they **actually behave** and what motivates them, the latter tending to be underpinned by a default **heuristic** of suspicion referenced to intuitive linkages to personal and/or economic advantage.

The public's impressionistic perspective on trust should be considered alongside findings highlighting the relative 'invisibility' of many Government agencies and departments. Public understanding of government bodies, their respective roles and responsibilities tend to be based on 'visible' elements and, on occasion, little more than inferences drawn on the basis of their title. Where public knowledge and direct experience is thin or partial, there is a tendency to fall back on intuitive **heuristic** inferences, based upon generally incomplete mental models of role, remit and practice (Petts, 1998; Pidgeon *et al.*, 2003a; Weyman and Williamson, 2007).

However, this should not be taken to infer that there is much to be gained from educating the public in this respect. Rather, key insights relate to gaining insight into institutional trust profiles referenced to a given issue and working with the public's natural/default orientations.

Although people tend to be wary when they perceive vested interest or **an angle** on an issue (**bias**), particularly where they pick-up information that reinforces a pre-existing suspicion of this, it would be inappropriate to conclude that they adopt a rigorous conscious approach to filtering the information they receive against some preconceived model of trust in the source. As in other areas, the dominant orientation and approach tends to be impressionistic and reactive.

Echoing findings from work on public concerns in other domains, there is evidence within the EWL/pension's evidence base of a multifaceted perspective on trust. While there is a general, and expected, finding of **low trust** in g/Government (DWP 528), it is also apparent that there are variations in department/agency profile, referenced to the issue under consideration, i.e. different sources are **trusted/mistrusted** to different degrees, depending on the types of information transmitted to or sought by the public, e.g. there is evidence that the DWP is a **trusted source** for information on State Pension values, but is seen as partisan and having a vested interest in terms of propagating the EWL agenda (DWP 557; DWP 528). There is also evidence that The Pensions Service enjoys a positive profile. However, very much the converse is the case for Jobcentre Plus. Sentiments extending to overt antipathy are reported towards Jobcentre Plus, most acutely amongst those who have direct experience of using its services. '[People] *do not expect to be treated well ... or given access to the kinds of jobs they are interested in.*' Its profile is said to be underpinned by a widespread perspective that the organisation is '*... unwelcoming and uncaring.*' (DWP 531, pp. 6 and 8). It is also apparent that there is no intuitive linkage in the public consciousness between Jobcentre Plus and EWL or pension advice (DWP 531).

Qualitative and quantitative sources highlight widespread bitterness (mistrust in government) over the recently announced rise in SPA (DWP 531; DWP 557). The degree '*... of bitterness and mistrust over pensions issues and related cynicism about the Government's motive for raising the SPA*' uncovered by the authors of DWP 531 was reported as being significant, to the point of posing a barrier to discussing issues surrounding extending working life with respondents. Importantly, these authors conclude that there is widespread **mistrust** of changes in Government policy towards older people, on a broad front, i.e. beyond the EWL life agenda. In this sense, the authors portray public perceptions of the rise in SPA as '*... part of a wider set of policies that had the potential to worsen the situation of the older population.*' i.e. '*increasing SPA fuelled the more general cynicism about government's motives in the field of extending working life.*' (DWP 531, p.96).

Beyond evidence of distrust over the EWL policy agenda, it is apparent that the public sees a legitimate role for government as regulator/final arbiter in the domain of overseeing fair play and acting as a safety net in the event of market failure. Two-thirds of adults believe that g/Government

should intervene in instances where pension funds fail, and that Government should be relied upon to provide a basic level of State Pension (DWP 434).

In terms of the trust profile of other stakeholders, there is evidence that employers are trusted more than other sources for advice over pensions, including independent and not-for-profit organisations (NAPF 2010; DWP 528). This finding is perhaps notable, in so far as it might have been predicted that employees would view employers as having a vested economic interest in this domain, i.e. having the effect of moderating trust. It also contrasts with qualitative findings, that report ‘... *a mixture of fatalism and anger in individuals’ comments* ... [about pensions advice from employers in the past].’ (DWP 531, p.74). In either event, it seems that only a small proportion of employees turn to their employer for pension advice, there being evidence of concerns over competence in this area (DWP 557), similarly with regard to ‘... *the possibility of flexible working and gradual retirement ... there was a sense that employers did not provide very much information [on this] ... hence people didn’t know whether gradual retirement was available to them or not.*’ (DWP 531, p.75).

Contributing to a pension does not seem to make much difference to who people trust, except in the case of employers, those who have an employer pension rating trust in employers higher than others (DWP 528). However, there is no evidence of any distinction between public and private sector profiles, it seeming likely that, despite reports of erosion in recent years (CIPD, 2010), public sector employers will be more trusted to deliver on pensions. There is no evidence of differences by age, gender, working status[?] or income in terms of the trust profiles attributed to stakeholders (DWP 528). However, evidence on institutional trust from other domains suggests lower levels, for Government and its agencies, attributed to social marginalisation and disaffection, amongst members of social groups D and E (Walker et al., 1998; Pidgeon et al., 2003a).

The finding that independent financial advisers (IFAs) tend to be perceived as neutral and, by inference, constitute a trusted source (almost a third of respondents, DWP 562; see also DWP 434 and DWP 557), contrasts with other findings ‘*Lack of trust in financial advisors was another recurring theme.*’ (DWP 531) and, as such, is worthy of further exploration. In view of evidence of low rates of engagement of financial advisers (16% of respondents, DWP 434; also see DWP 562), it seems unlikely that the majority of reported positive responses were informed by direct experience, or even the experiences of ‘trusted others’. A plausible explanation seems to be that respondents were falling-back on inferential **heuristics**, relating to properties of the title, i.e. the word ‘independent’ has positive semantic associations, with neutrality and absence of bias. Comparable effects have been encountered in other trust research (Pidgeon et al. 2003a; Weyman and Williamson, 2007). More fundamentally, it seems that the public do not view IFAs as having much to offer regarding decisions over EWL, beyond pension investment options (DWP 562).

It has been suggested that trust in pension providers can be conceptualised in terms of ‘competence’ and ‘care’ (DWP 434). In terms of ratings of ‘competence’, financial institutions (banks/building societies are rated higher and appear to be the most trusted (~30%); with little to distinguish between the relatively less positive profiles ascribed to employers, 12%, and Government (State Pension) 10% (DWP 434).

However, this contrasts with rating of ‘care’ (broadly considered here to be synonymous with ‘altruism’/‘acting in the public interest’) where not-for-profit organisations are the most trusted, followed by g/Government and employers. The interpretation here is that, where the public believe they see scope for self-serving commercial interest they tend to fall back on the seemingly ubiquitous heuristic that the ‘profit motive corrupts’, i.e. motivating behaviour that is counter to the client’s/public’s interest (DWP 557).

A further observation is that limiting the conceptualisation of trust to some combined rating of **competence** and **care** (DWP 434) seems to miss the key issue of public **confidence** in the concept of pensions and their personal pension values. This is a potentially important issue on at least two counts:

- levels of trust and confidence could diminish to the point where they encourage withdrawal/opt-out from pension schemes;
- young people may be discouraged from taking up pensions in the first instance.

However, survey evidence seems to suggest some resilience in this area. NAPF, for example, claim that ‘... *although only a minority believe their pension will provide them with enough income in retirement, it is not because they do not trust them*’ (NAPF 2010) and that 44 % (the DWP 528 survey quotes 50%) of their sample rating pensions as the ‘*most effective way to save for retirement*’. Other sources highlight mistrust and recourse to alternative preferred retirement investment strategies, although, this orientation seems to be concentrated amongst those with bad pensions experiences (DWP 434).

Evidence of the modest level of trust vested in banks and building societies (DWP 434; Gough and Hick, 2009) for pensions advice seems to reflect further recourse to the ‘profit motive corrupts’ heuristic, suggesting that there is limited value in using these sources as a conduit for policy initiatives on pensions advice (DWP 562). More fundamentally, there is evidence that the public does not view these institutions as likely/relevant sources from which to seek pensions’ advice. Despite recommendations to the contrary from some sources (DWP 531, p.121), on the balance of evidence, it seems that broadly equivalent conclusions can be drawn regarding the profile of an array of third sector advice/advocacy organisations, e.g. the Citizens Advice Bureau, Age UK, disability groups welfare rights/law centres; trades unions; GPs and other health professionals, i.e. while all enjoy high trust ratings, they are not intuitive sources for providing information and advice over EWL, retirement planning or pension investment (DWP 562; DWP 557).

A number of studies highlight the influential role played by social networks, in particular friends and family and colleagues, in terms of propagating established pension investment/non-investment, retirement age norms and related habits (by inference, propagating any heuristics and biases that underpin their choices). Some authors go as far as to cast these groups as reliable (trusted) sources of pension information and advice (DWP 528); both positive and negative. There are claims that direct interaction with people with experience of pensions is more likely to generate trust, rather than distrust (DWP 528). However, the grounds on which this conclusion is drawn are unclear. Moreover, it does not chime with established insights within the social amplification of risk framework, and what is known of **cognitive availability** and **dread** effects. It has also been claimed that young people (16-24 years) are more likely to say that ‘experience of a friend or relative’ had most influenced them (38%), compared with 26% for all groups (DWP 528).

More fundamentally, while in no way negating the potentially important normative role of significant others, construing them as sources of information and advice over pensions and later-life working arrangements, implicitly assumes that individuals (generally younger people) are actively seeking their advice on these issues. However, this depth of processing would be somewhat uncharacteristic of the general approach to decision-making over EWL issues. Additionally, in terms of the potential corrosive effect of pension failure this perspective does not really capture the subtleties of the way that ‘folk stories’ permeate and circulate at a community level (see, for example, Lantz, 1971).

B.5.6.3 Social amplification of risk

A number of sources conclude that ‘... *high levels of mistrust, disappointment and uncertainty, extending to hostility surround pensions.*’ (DWP 557). Similarly, ‘... *claims of miss-selling of personal pensions and of endowment policies have also acted to reduce public trust in financial institutions and their products.*’ (DWP 434; Gough and Hick, 2009). However, it is reported that Government is less distrusted in the pension domain than private pension schemes (Gough and Hick, 2009). What is less certain is the extent to which the recent/ongoing banking crisis and stock market decline impact on public orientations to pensions investment decisions.

While there is strong evidence that public understanding of the linkages between private DC pensions and the wider financial markets is, on the whole, limited and sketchy, at a more impressionistic (**heuristic**) level, there is widespread awareness of a pensions crisis. As noted elsewhere, changes in State Pension arrangements and the raising of SPA seem to have had the effect of introducing uncertainty into an area where certainty was previously taken as a given.

Beyond personal experience, the significant negatively framed media coverage of pensions and other investments over the last decade, notably high profile events such as the Equitable Life failure, is widely considered to have challenged public confidence in pensions (Gough and Hick, 2009; DWP 562). As others have commented, ‘... *this is a generation that has experienced some of the worst “financial scandals”.*’ (DWP 557, p.119). It has also been suggested that widespread **outrage**, mistrust and negativity over pensions amongst older people has the potential to permeate to younger people, i.e. the potential for it to become culturally accepted/**normed** that pensions are unreliable (DWP 531).

Recent media news stories are said to be the biggest influence on trust (DWP 528). Importantly, ‘bad news’ stories tend to possess greater amplitude, with a stronger ripple effect that leaves a more durable memory trace than ‘good news’ stories. ‘Bad news’ stories also tend to be more cognitively available where there is an established undercurrent/disposition amongst the public of suspicion, i.e. latent mistrust. Additionally, reports of widespread public scepticism and mistrust of the media should not be interpreted as negating its role as a primary reference source and probably more saliently, the potentially corrosive influence of a persistent background ‘drip, drip’ of bad news (Pidgeon *et al.*, 2003b; Breakwell, 2007).

Although none of the studies reviewed explored the issue directly, we know from other research domains that the media can play a pivotal role in contributing to an amplification of public concern, sometimes producing significant ripple effects and impacts on public orientations and behaviour, e.g. the MMR triple vaccination controversy and BSE/CJD issues. Precursors to the social amplification of risk include: uncertainty; lack of personal control; harm (‘unjustifiably’) imposed by others; perceptions that key stakeholders are pursuing partisan interests counter to the public interest; attempts to change the natural order of things and perceived regulatory/governmental failure through inaction (see Pidgeon *et al.*, 2003b).

B.5.7 Perspectives on employability, training and beliefs regarding employer practices

Key findings

- Around half of people aged 50+ years express an interest in post-SPA paid work. Most of these people want to work reduced or flexible hours.
- Most people who express an interest in working beyond SPA prefer to remain working for their current employer.

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- There are social grade differences in disposition to EWL. Those in lower socio-economic groups are least engaged. Job (dis)satisfaction appears to be a causal influence.
- The absence of established precedents in most organisations for post-SPA working inhibits employee/employer discourse on this issue.
- The absence of cultural precedents within many workplaces feeds fears amongst employees that a request for flexible working or reduced hours will be interpreted as a lack of organisational commitment.
- There are fundamental differences between employer and employee objectives regarding flexible working arrangements.
- There is widespread scepticism regarding the availability of attractive, good quality, part-time jobs.
- There is speculation that the definition of a **good job** may vary by age, but there is no substantial empirical evidence on this.
- Care should be taken to avoid over-interpreting older workers' desire for more flexible work, as this is valued by workers of all ages.
- Rates of demand for volitional downshifting amongst people aged 50+ years is offset by a desire for promotion/more responsibility. Most downshifting is involuntary and is more appropriately construed as underemployment.
- Robust evidence of a business case for employing older workers appears to remain elusive. The premise that a robust business case will motivate employers to employ older workers also appears to reflect a leap of faith rather than being grounded in empirical evidence.
- There is a very widespread belief in employer prejudice against employing older workers.
- Anti-age-discrimination legislation regarding the age of retirement tends to be seen as a smoke screen for State Pension savings.
- Age-related training deficits reflect a combination of employer resistance and diminished individual disposition to engage. The evidence on employee (un)willingness to train is inconclusive.
- There is no clear causal linkage between participation in training and EWL.
- Amongst the over 50s seeking work, levels of awareness of and beliefs surrounding the availability of training are low. It also seems that the availability of dedicated courses aimed at the over 50s is low.

B.5.7.1 Status of evidence

The evidence on training, employment options and employer practices is derived from the accounts of employees (including the unemployed/potential employees) and consequently has the potential to embody an array of attribution biases.

B.5.7.2 Employment options

For those who remain in work aged 60+ years there are reports that attachment to work gets stronger, and progressively weakening amongst those who withdraw. This is likely to reflect the fact that those who remain economically active are a **survivor population** and those who drop out are increasingly not there in survey results. It also seems likely that those who remain may do so where they have arrived at working arrangements that are a good fit with their non-work ambitions/commitments.

Of those who report wishing to remain in work post-SPA around three-quarters would prefer to remain working for their current employer (EHRC, 2010). The most notable finding is that only around 10% appear to want to work on a full-time basis, post-SPA. As noted elsewhere, many feel reticent over approaching their employer, for fear this will be interpreted negatively. The absence of strong EWL cultural precedents probably feeds this. The above is also true of the 50-60/65 years cohort (DWP 557).

The scale of employee inhibition from engaging with employers appears to be significant, with reports of comparable effects for those suffering from ill-health. A third of employees aged 50+ years who rate themselves as in poor health report feeling unable to approach their employer regarding adjusted working arrangements (EHRC, 2010).

Most people who report that they **are** considering EWL are: (a) happy with their jobs; and (b) would prefer to stay with their current employer. Unsurprisingly, those who are unhappy with their current job either wish to change to an alternative, or withdraw from the labour market. The main sources of dissatisfaction seem to relate to hours of work and (in)flexibility (EHRC, 2010; McNair, 2007).

It is tempting to interpret findings highlighting enhanced choice and flexibility over work as offering the key to motivating EWL, and it seems that there is some promise in this. However, it is important not to over-interpret findings, given strong evidence of a desire for greater autonomy and choice over the configuration of work across all age groups (see, for example, Blauner, 1964; Warr, 1983). As McNair notes, *'... older people, like younger ones, seek a degree of control over their working lives,... if employers make jobs more attractive, offering greater flexibility and control allowing employees to move to part-time and flexible working to take up new challenges or to "downshift" in terms of responsibilities without disproportionate financial penalties workers are likely to stay.'* (McNair, 2007).

Despite varying emphases from different sources, statistical evidence of the demand for voluntary downshifting appears to be modest (4%), being outweighed by reports of underemployment, particularly amongst those over 50s (EHRC, 2010).

It is difficult to establish the extent to which phenomena such as part-time working; downshifting/ under-employment; flexible hours, etc. reflect volitional behaviour (choice) on the part of employees, discrimination by employers or the absence of effective carers' guidance. *'Would such people, given the choice, which they do not believe they have, prefer something different?'* (McNair, 2007, p.96).

In view of the above, evidence of widespread downshifting amongst the over-50s is perhaps best viewed as predominantly involuntary. There is also evidence of a linear relationship with age (12% of 50–55 year-olds; 21% of 50–59 year-olds, 38% of 60–64 year-olds and 75% within the 65–75year-old cohort (EHRC, 2010).

Reports of downshifting/seeking alternative employment, in a bid to reduce job stress (high job demands, low control and social support) suggest that this is a significant factor, not only in terms of stimulating an early health-related exit, but as a disincentive to continuing work. Rates of reporting of job stress have increased to unprecedented levels over recent decades (Health and Safety Executive (HSE), 2000, 2006). Changes in the economic base, in particular the growth in service sector jobs, are likely to be of relevance here. While this shift may have reduced the physiological demands of work (Disney and Hawkes, 2003), there is correlational evidence of a linkage between jobs which involve direct interaction with the public and (self-reported) mental stress (HSE, 2005). *'The high incidence of stress ... has significant policy implications in terms of the extending working lives agenda ...'* (EHRC, 2010, p. xi).

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Despite speculation that the reference criteria applied in defining a ‘good job’ may vary with age, there seems to be no empirical evidence on this. Care should also be taken over interpreting the finding that ‘... *negative job attitudes decrease with age.*’, as samples represent survivor populations i.e. those who remain in work may simply be individuals who hold intrinsically more positive attitudes to work, *per se*.

In terms of job-mobility, the EHRC suggest that the over-50s have two fears about changing jobs: fear of rejection by employers and concern over the financial implications in the run-up to retirement (EHRC, 2010). Quoting Office for National Statistics (ONS) data, McNair notes, that job mobility declines with age, although the effects are less pronounced amongst those educated to degree level and above (McNair, 2007). While a proportion of women 50+ years change their jobs/retire, principally due to caring commitments (McNair, 2007) and, in the case of married/co-habiting women to achieve alignment with their partners’ dates of retirement (DWP 434), in most instances it seems that their job change patterns mirror those of men. Orientations to employment type/career change also seem to vary by experiences of work (there are crude linkages here with Standard occupational Classification (SOC)/social class). Specifically, there is evidence that individuals with a more varied/chequered employment history are more disposed/resigned to engaging with alternative job choices post-SPA. Women are overrepresented in this group (DWP 557).

People in lower skilled jobs tend to be the least disposed to EWL, this appearing to be linked with rating of job-satisfaction. Thirty-nine per cent of those over 50 years engaged in low-skilled/elementary work report a desire to change their job (EHRC, 2010).

Despite the appeal of part-time/flexible working, a number of sources point to widespread beliefs amongst employees that there are insufficient part-time and/or flexible working options available (EHRC, 2010). This belief seems to be substantively accurate, with flexible options only open to a relatively narrow band of employees in a limited range of sectors (DWP 299; CITB, 2007).

B.5.7.3 Employer practices

The overwhelming evidence is that older workers and those with ongoing health issues are disproportionately excluded from work and are overrepresented in low-skilled, less secure, low paid work, (Dearden, 1998; Taylor and Walker, 1998; Bardasi, 2002; Fevre *et al.*, 2008). The current policy perspective regarding employer practices is one of self-regulation and corporate social responsibility, with much faith placed in education initiatives (Black, 2008b); some have suggested ‘*unrealistic faith*’ (Taylor and Walker, 1998). Core ‘educational themes’ advanced by g/Government and industry associations focus on the business case for EWL; a managed approach to maintaining well-being/rehabilitation and debunking⁴⁶ of cultural stereotypes, e.g. older people have higher absence rates and lower levels of productivity. However, there is a paucity of rigorous evidence in support of the business case (Weyman, 2010) and strong evidence of higher absence rates amongst older workers (HSE, 2005).

There is some discrepancy in findings over employee claims of age discrimination on the part of employers. Porcellato, *et al.* (2010), for example, report relatively few individuals citing personal experience of employer age discrimination. However, other sources suggest that discrimination is widespread (Arrowsmith and McGoldrick, 2001; McNair and Flynn, 2005; Bytheway, 2010; TAEN, 2008; cited in EHRC, 2010, DWP 110).

In either event, and importantly from the perspective of public EWL orientations and behaviour, it seems clear is that there is an almost universal belief amongst the public that discriminatory

⁴⁶ Empirical evidence does not reinforce this position, see Taylor and Walker (1998); Skirbekk (2003); HSE (2005).

practices are widespread. That said, it would be unwise to view the high reported proportion (79%, EHRC, 2010) of retired people saying that a greater policy focus on employers to recruit older workers would help them to get jobs as wholly free of attribution bias.

There is evidence of widespread cynicism over justifications for rises in SPA on grounds of anti-age-discrimination legislation, and limited confidence that the related legislation will protect older workers from being discriminated against by employers (DWP 557). Some authors have also cautioned that this background orientation of scepticism acts as a cognitive filter, to the extent that Government/DWP messages that stress employer enthusiasm for EWL are at risk of clashing with entrenched beliefs/experiences of the workplace (DWP 557). Whether substantively accurate or otherwise, such beliefs potentially attenuate employee motivation to engage in discourse with employers on this issue. However, ultimate *‘Control lies with the employer and either perceived occupational incompatibility or inflexibility by employers are the main obstacles ...’* to take-up (EHRC, 2010; p.29).

Despite reports of widespread interest and apparent desire for increased flexibility over working hours, over two-fifths of employee respondents indicate modest opportunities and an array of (perceived or actual) structural barriers to take-up, due to the organisation of work, e.g. shift working; team working. Beyond employee preferences, benefits to employers are held to include smoothing of peaks and troughs in demand for goods and services and enhanced industrial relations, due to increased employee satisfaction (Loretto *et al.*, 2005; Department for Business, Enterprise and Regulatory Reform (BERR), 2008). However, few of these claims are robustly evidenced. It is also important not to be seduced into over-interpreting the degree of alignment between employer and employee interests. Despite the use of common terminology, it seems that the term **flexibility** reflects different, and not wholly compatible, objectives on the part of employees and employers.

The most commonly cited rationale (15%) for not looking for post-SPA work is the belief that no employer would recruit the over 65s. When asked about factors that would assist return to work, 71% cite *‘employers being more willing to recruit older workers’*, 68% *‘if employers were sensitive to health needs’* and 68% *‘if there were part-time or flexible jobs’*. Forty-five per cent cited *‘more affordable training’* (EHRC, 2010)⁴⁷. *‘Employers continue to play a key role in facilitating or preventing older people from meeting their employment needs and preferences.’* (EHRC 2010, p.136). There is also strong evidence that once out of work post-SPA, the likelihood of return is low and that where it does occur opportunities tend to be restricted to low status, low paid, less secure work, with a high probability of under-employment (Couch, 1997; Walker, 2002; McNair, 2007; EHRC, 2010).

B.5.7.4 Training

The evidence on training embodies elements relating to attitudes and orientations of employees and potential employees to participation, as well as beliefs surrounding employer disposition to invest in older workers. A limitation of the evidence base in this area is that there has been little engagement with issues surrounding the extent, duration or quality of training received. In almost all studies training is treated as a generic entity, i.e. no distinction is made between simple instruction, perhaps lasting as little as an hour or so and high quality programmes of training and skill acquisition. There is also very little in the way of distinction made between skills based training and other job-related training, e.g. health and safety training; product quality control and the like.

⁴⁷ These proportions do not appear to represent discrete groups. It is unclear how much overlap there is in response category membership – but this is likely to be high. Additionally, the sample base for these figures was individuals who said they would.

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The available evidence indicates that age-related training deficits reflect a combination of employer resistance and diminished individual disposition to engage. What cannot be concluded on the basis of the evidence base is the relative strength of these push and pull factors.

Newton *et al.* (2005) attribute rates of older employee participation in training to lack of individual engagement/volition rather than lack of opportunities offered by employers (also see DWP 299). However, other authors highlight uncertainty on this issue (McNair, 2007). There is also no robust evidence of active resistance to training amongst those in employment.

However, there appears to be an array of demographic differences, e.g. opportunities for training are reported to be fewer in small and medium sized businesses (McNair, 2007). Additionally, *'... those who did receive support were more likely to be highly qualified, high earners in professional/managerial jobs working in larger firms.'* (McNair, 2007). The EHRC offers evidence of around half of 50-55 year-olds reporting that they had received employer-based training at some point in the previous three years. However, the authors also report a negative linear effect with advancing years (44% for 56-59 year-olds), diminishing to around a third for 60-64 year-olds (EHRC, 2010, p.48)⁴⁸.

Rates of training amongst individuals aged 55+ years who are unemployed/economically inactive is said to be less than 10%, with the likelihood of a 55 year-old undertaking training around 50% less than a 35-44 year-old (Newton, 2006). There are also reports of a downturn in employer training provision. However, it is not clear whether this is a general impact of recession or a specific older-worker effect (DWP 673).

Despite intuitive appeal, it seems that there is no clear correlation between participation in training and EWL. Although some studies report a positive relationship, McNair (2007) concludes that the direction of causality is unclear.

In terms of gaining access to employment, Porcellato *et al.* (2010) report claims amongst the over 50s that a significant barrier relates to employers' tendency to focus on formal qualifications, in preference to work-based skills and experience (also see DWP 557). This was felt to limit re-employment options to low-skilled, low status, low pay, poor jobs. There is significant scope for (external) attribution bias in such claims, and the sample used by Porcellato *et al.* appears to be very small (N = 16). But it is incontrovertible that older people have fewer formal qualifications than younger people.

It is also apparent that social precedents/established cultural norms regarding training for older workers (particularly those over SPA) are scant. *'Some appeared to regard it [the classroom] as an alien world and lacked confidence to tackle it.'* (DWP 557, p.54). Additionally, the limited time remaining for older workers to capitalise on formal learning tends to diminish its subjective value (DWP 557). Conversely, there is evidence of older people claiming to be just as willing to invest in learning new skills as younger cohorts (Taylor and Unwin, 2001).

Amongst the over 50s seeking work, levels of awareness of, and beliefs surrounding, the availability of training appear to be low. There are also reports of a reluctance to attend mainstream education establishments, such as further education colleges, these tending to be viewed as the domain of young people, combined with scepticism regarding the likelihood of training leading to enhanced employment opportunities (DWP 557). Notably, the authors of DWP 557 comment that they *'... found it hard to track down relevant and convincing [training course] material that was suitable ... and attuned to the context of extending working life.'* (DWP 557, p.52) concluding that what is offered needs to be tailored to meet the needs of older people, not just in terms of content but also in terms of venue.

⁴⁸ The sample in this study also appears to have been restricted to those in employment.

B.5.8 The impact of the rise in SPA on attitudes to EWL

Key findings

- The rise in SPA has fuelled widespread sentiments of resentment and challenged established notions of social equity.
- There is said to be a broad-based distrust of changes in Government policy towards older people, i.e. public attitudes to EWL may be influenced by broader perspectives on public policy regarding older people.
- A rise in SPA is a factor in people's decision-making over retirement, but it would be unwise to assume that it is the dominant factor.
- The change in SPA has contributed to established uncertainty and concern over financial arrangements in later life. But it seems unlikely that this will translate into increased motivation to invest in pensions or enhance the willingness to extend working life. It may contribute to rates of withdrawal and disengagement.
- The conclusion that the impact of a rise in SPA on EWL will be greatest on low income groups may be somewhat optimistic, in view of pervasive cultural norms, the incidence of ill-health and employment options.
- A potential barrier to policy delivery on EWL, compared with more opaque policy agendas, is the transparent alignment in the public consciousness with the objectives of Government ministers, of whom there is widespread distrust.
- There is widespread acceptance of the logic of raising SPA, but only modest support (35%) for an enforced rise for all, the majority (52%) disagreeing with this policy.
- The idea of working for a couple of extra years (with choice over how much and for how long) seems to be less problematic in terms of public acceptance, than the inference that this heralds the beginning of a long-term and corrosive agenda on retirement time.
- It is unclear whether the higher expected age of retirement amongst younger respondents reflects a cultural change in retirement orientations or resigned acceptance.

B.5.8.1 Sense of injustice and uncertainty

There is evidence that the announcement of a rise in SPA has fuelled widespread resentment and challenges established notions of social equity. People (most likely to be, most acutely, those with insufficient financial options to permit choice) feel cheated, disappointed, angry and betrayed by the Government. Ceasing work before SPA is widely seen as a 'good', or 'bonus' and working beyond as a 'penalty' (DWP 557).

There is widespread mistrust of changes in Government policy towards older people on a broad front, i.e. raising SPA is seen, at least by some, as '*... part of a wider set of policies that had the potential to worsen the situation of the older population. ... increasing SPA fuelled the more general cynicism about government's motives in the field of extending working life.*' (DWP 531, p.96).

However, because the rise has yet to take effect, empirical evidence of the impact on EWL/pension behaviour is limited to extrapolations from attitudinal data. Moreover, while SPA is a factor in people's decision-making over retirement, it would be unwise to assume that it constitutes the dominant factor. If this were the case we would expect to see higher rates of working to 65 years, under current arrangements. But this is not the case. '*... a wide variety of personal, structural and cultural factors [and the interaction between these] serve to influence decisions about when and how to leave employment ... many of these decisions are not in this sense truly individual.*' (DWP 531, p.124).

By extrapolation, we would suggest that the temporal coincidence of high profile mediated discourses on changes to pension arrangements, the mass transition to DC from DB pensions and pension failures with the rise in SPA, seems likely to contribute to an impression of crisis in the public(s) consciousness (DWP 438; DWP 562; DWP 528). Importantly, it seems likely that the change in SPA will contribute to established uncertainty and concern over financial arrangements in later life. The combination of uncertainty and a strong sense of social injustice can reasonably be predicted to have the effect of amplifying public concern, possibly extending to outrage. However, it seems likely that, where this occurs, it will be concentrated amongst certain social groups, but not restricted to those who are most socially disadvantaged. It also seems unlikely that this concern will translate into increased motivation to invest in pensions or enhance the (willing) desire to EWL.

Recent experience of the rise in SPA for women is that this met with modest levels of concern/opposition. However, while not widely welcomed, opposition to this change was likely mitigated by the overtones of gender equity. In terms of the impact on the duration of working life, it seems that ‘gains’ are modest, *‘... there was no evidence to suggest a strong link between the policy initiative and women’s likely retirement timing.’* (DWP 531, p.94). In the case of women in a long-term relationship, there is evidence of a disposition and tendency to align with the retirement date of their, typically, older male partners (Lissenburgh and Smeaton, 2003, cited in DWP 299). *‘The overall feeling towards extending the SPA [for all] was more negative than the overarching reaction to equalising SPA.’* (DWP 531, p.95).

It has been suggested that **push effects** associated with raising SPA for women (and men latterly) are most likely to have an impact on retirement behaviour in low income households (DWP 531). *‘Many of our low income respondents expected to carry on working to SPA and beyond, or were at least resigned to it.’* But they are still angry about it and *‘... did not respond at all well to the hard messages we tried out on them.’* (DWP 557, p.95), e.g. messages of the type that stress *‘for the good of the country’* are not appealing or persuasive, tending to have the effect of making people feel uncomfortable, even anxious but with no apparent impact in terms of increasing disposition to extend working life (DWP 557). However, despite evidence that basic financial necessity is the most important reason for working for around half 50-59 year olds, and a quarter of those over 65 years (EHRC, 2010), the conclusion that the impact will be greatest on low income groups may be somewhat optimistic, given evidence that this strata is the most culturally resistant to EWL, are more likely to suffer from debilitating ill-health in later life, are more likely to be made redundant and experience the most restricted employment options, particularly during periods of mass unemployment (McNair, 2007; DWP 434; EHRC, 2010).

In other risk domains, uncertainty and a strong sense of injustice have translated into organised concern. At an individual level a likely effect is disaffection, withdrawal and disengagement (DWP 294), *‘Not knowing how much income to expect in retirement is very unsettling and also tend to [further] paralyse already weak impulses to plan ahead.’* (DWP 557, p.44); *‘Overall there was a sense that the goal posts kept moving and it was quite difficult for the individual to do the right thing.’* (DWP 531 p.84; DWP 294). If this interpretation is accepted, it raises important questions regarding the utility of a policy perspective predicated on the basis of stressing the financial benefits of planning for later working life (pre- and post-SPA) and retirement. The fact there is also evidence of *‘... widespread cynicism in relation to the Government’s motives for intervention in matters relating to pensions and retirement.’* (DWP 531, p. 119) raises the possibility of significant public alienation to the EWL policy agenda.

All policy agendas are at some level political agendas, however, some enjoy more intuitive and transparent linkages to the objectives of Government Ministers. It seems that a high degree of transparency prevails in the current instance. Thus, the degree of separation between public perceptions of Government policy objectives and Government policy delivery on this issue can be

predicted to be modest. This will, foreseeably, present difficulties for the policy delivery function beyond those experienced in less contentious areas, ‘... *a legacy of bitterness and mistrust over pensions issues and related cynicism about the Government’s motive for raising the SPA.*’ (DWP 531, p.119), have been found to constitute a significant barrier to discussing EWL with the public, i.e. the public may exhibit lower rates of engagement with (DWP) education and behavioural change initiatives and interventions compared with other policy delivery domains, partly due to perceived linkages with ministers and partly because the policy is, simply, unpopular (EHRC, 2010; Vickerstaff, 2008).

B.5.8.2 Impact on age of retirement

The rise in SPA is likely to have a modest impact on those who intend to retire early, at least if they are able to realise their ambition. Findings from the NAPS (2006–09) indicate that around a quarter of individuals earning £29k+ intend to retire in their 40s or 50s, although it is likely that a lower percentage will have sufficient financial provision to translate this aspiration into behaviour. However, the finding that ‘*Only very small numbers had retired at or after SPA, meaning that analysis is only possible for those who retired before SPA ...*’ (DWP 434, p.162), would seem to suggest that many are successful in realising their early retirement ambitions.

Few people have difficulty in comprehending that Britain has an ageing population, with increasing longevity placing a burden on the Exchequer, and that this **justifies** a rise in SPA. The logic of this is transparent at a population level. But, at an individual level this does not allay fears of an early demise (DWP 557) or reduce the sense of potential loss associated with extending their own working life (particularly amongst the semi- and unskilled). While there is evidence of engagement with the need to raise SPA, there is only modest support (35%) for an enforced rise in SPA for all, a majority (52%) expressing disagreement with this policy (DWP 434). There also appear to be large social class related differences regarding the premise that people should work longer to take account of increased life expectancy: 49% of graduates agreed, compared with 28% of non-graduates (DWP 434).

The idea of working for a couple of extra years (with choice over how much) is, not surprisingly, much less daunting than some indefinite extension. However, it seems that some see any change as the thin end of a moveable wedge, in an area where there was previously a high degree of certainty. This extends to the view, in a minority of instances, that the State Pension is being phased out (DWP 557).

There is evidence that younger respondents ‘expect to retire’ later than older cohorts. Twenty-two per cent of 18–24 year-olds are said to expect to retire in their 70s or 80s (DWP 434), which could be interpreted as indicative of some age-related change in social norms. What is not clear is whether the underpinning orientation is resigned acceptance or constitutes evidence of some more fundamental change in retirement orientations. Notably, the Euro Barometer Survey 2003, reports a four year average disparity between preferred (mean 58 years) and expected age of retirement (mean 62 years) (Esser, 2005).

B.6 Secondary data analysis

Key findings

- The average age of retirement is highest amongst the middle income strata. This strata exhibits a narrower range of retirement age than the other strata.
- **Push** and **pull** influences on pre-SPA retirement impact differently on different social strata/grades.
- Possession of significant pension/asset values appears to serve as an inducement to higher managerial/professional groups to pre-SPA retirement.

- For those on low income, redundancy (implicitly no choice or employer incentivised) plays a more significant role in pre-SPA retirement than it does for other social grades.
- Middle income groups appear to be less prone (at least to date) to enforced redundancy and are unlikely to possess sufficient pensions and saving assets for these to significantly incentivise pre-SPA withdrawal from work.

B.6.1 Introduction

In Section B.5.4 a theoretical model was developed around factors that influence retirement decisions. Drawing on the literature on retirement decisions, a range of **push** and **pull** factors were identified as being key to explaining observed variations in age of retirement. It was also concluded that social grade acts as a fundamental cleavage over the way that retirement decisions are reached. The theorised model (Figure B.2; Section B.5.4) suggests that typical retirement ages and their spread vary by social grade due to the differential influence of the push-pull factors. This section aims to test the validity of the theoretical model using available quantitative, empirical, evidence.

Previous empirical analysis of the relative importance of push and pull influences on retirement decisions highlight the primacy of health status, possession of a private pension and employment status of spouse (Crawford and Tetlow, 2009). However, what cannot be established on the basis of this evidence is the extent to which identified influences are prone to variability by social demography, in particular social grade.

B.6.2 Data set choice and limitations

The analysis in this section attempts to model the relative importance of a range of push-pull factors on age of retirement for the three social grades characterised in the model in Section B.5.4.

A key consideration surrounded selection of the most appropriate data set(s). A number of data sets, notably the BSAS and the DWP's NAPS generate retrospective and prospective attitudinal/knowledge data, e.g. retirement and pension investment intentions. As noted elsewhere, a limitation of this type of evidence is that it embodies an unquantifiable degree of hindsight (attribution) bias, and potential dislocation between intention and behaviour. Also, unplanned factors, such as ill-health, poor pension performance or redundancy can flood ambitions over when to retire.

The preferred approach, therefore, was to focus on (retrospective) behavioural data rather than attitudinal evidence, i.e. not what respondents believe **will** determine their retirement decision, nor post-retirement rationalisations for action, but what factors predict age of retirement behaviour. For this analysis the ELSA data set was used. This large data set (N = 11,050) tracks participants aged 50+ years from 2002–09. It offers data on a range of factors including: health, economic position and quality of life.

As with any data set, ELSA has limitations, particularly when explored in ways beyond the intentions of its architects:

- Our analysis is, necessarily, limited to the sub-set of respondents who have actually retired, i.e. a relatively small sub-sample of the ELSA data set.⁴⁹ This inevitably limits the scope for analyses.
- The work, healthcare and pension experiences of respondent's, typically born around the middle

⁴⁹ Data limitations placed further restrictions on those who were selected for analysis beyond the requirement of being retired. Appendix A outlines, in more detail, how the sample of retired were selected.

years of the 20th century, may be different from younger cohorts.

- The ELSA data set was not designed specifically to analyse decisions about when to retire. Some of the push-pull factors theorised in Section B.5.4 are either not measured at all or are imperfectly operationalised versions of those factors.
- A final caveat is that because so few people of this examined generation extend working life, sample sizes for individuals working beyond SPA is small. Therefore, arising predictive models of retirement age draw heavily on data from those who retire below or close to SPA (60/65 years).

B.6.2.1 Sampling from the ELSA data base

The analyses described in this section are based on sub-samples of the full ELSA data set (N = 11,050) (see Figure B.4). There are two reasons for this:

- since the intention was to examine the age of retirement of those already retired, those not retired were excluded (5,853 cases);
- employment-related data were only recorded if the respondent was in employment during one of the four waves. In order to obtain employment-related data, those who had not been employed during any of the waves were excluded from the analysis (3,780 cases).

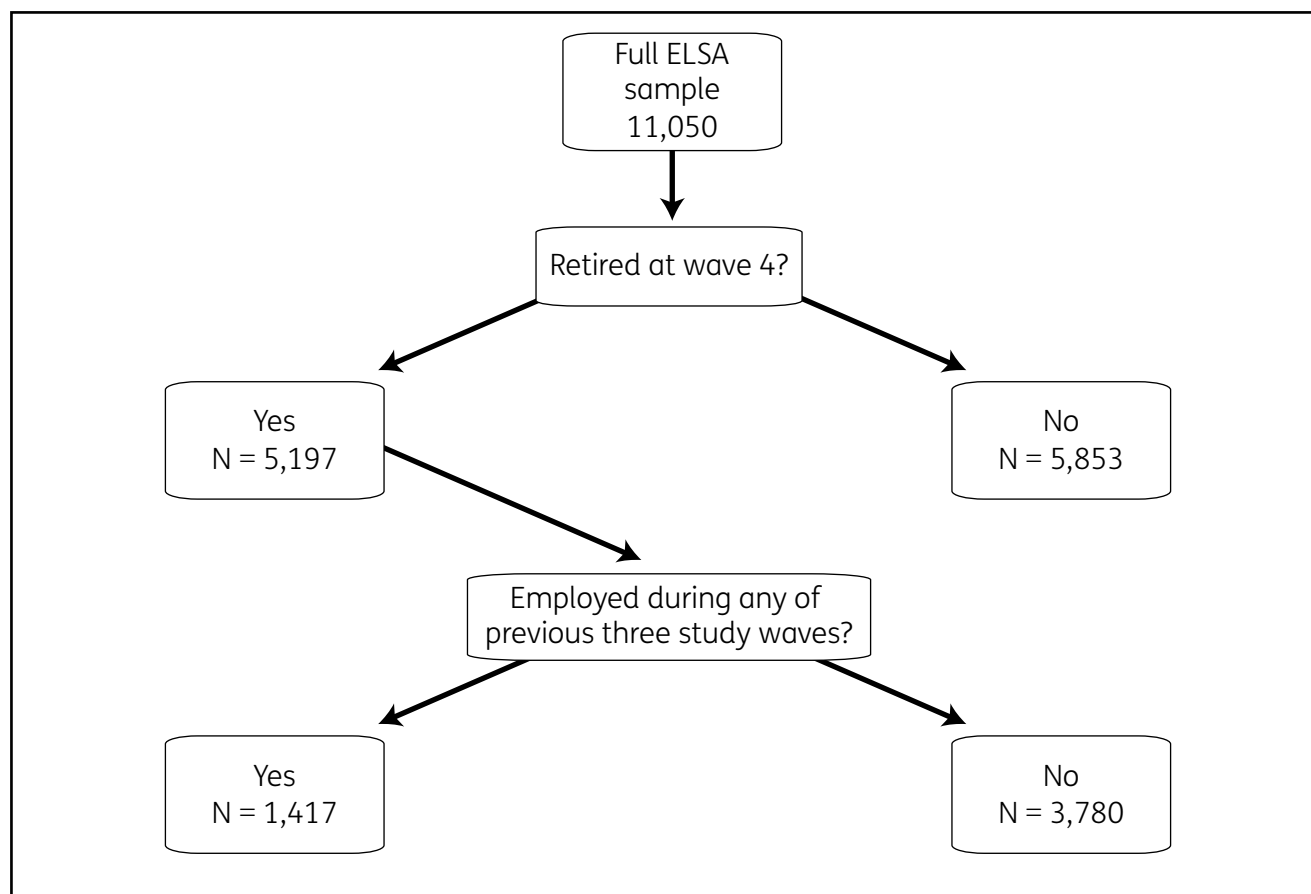
Our analysis was conducted on the sub-set of ELSA respondents who were retired by wave 4, but had some history of employment during earlier waves (N = 1,417) (see Figure B.4).

It should be borne in mind that this group of newly retired may differ from other retired sample members, which will have implications for the ability to generalise from these findings, e.g. by definition it will exclude those who have moved from a non-employed status, such as unemployment, to retirement. It may also under-represent early retirees as well as those who extend working life. Descriptive analyses (Table B.2) show that when compared to those within the ELSA sample who were retired through waves 1 to 4, the newly retired are significantly younger. They are also more likely to be female, more likely to be married (but less likely to be widowed) and come from similar occupational groups.

Table B.2 ELSA composition of the retired wave 4 with retired waves 1 to 3

Variables	Retired at wave 4, recently employed	Retired waves 1–3
Age	66 (SD 14)	72 (SD 17)
Female	53%	61%
Married/widowed	68%/18%	58%/28%
Lower Socio-Economic Classification (groups 5–7)	37%	38%

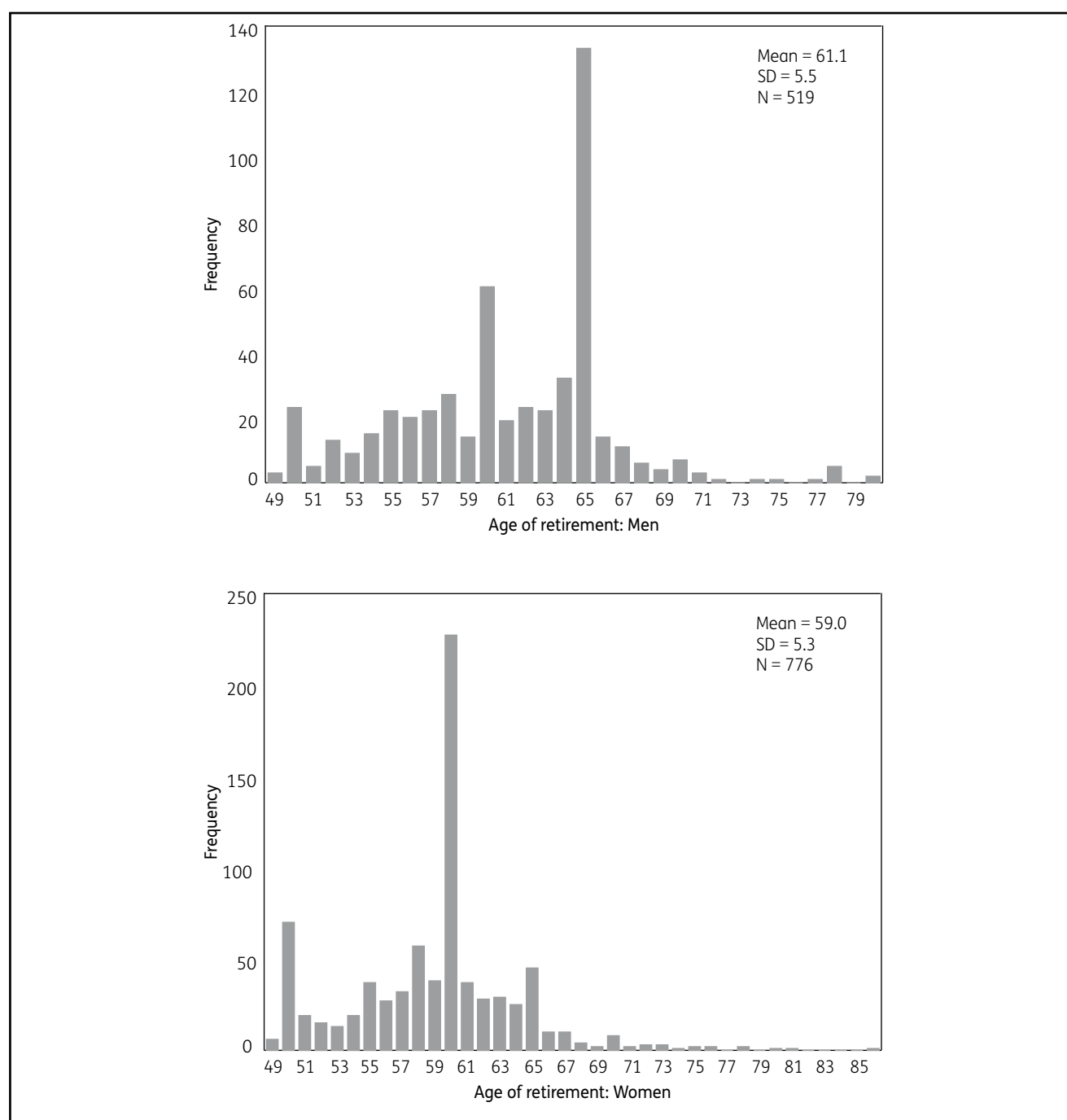
Figure B.4 Summary of ELSA sample



B.6.3 Descriptive statistics

The mean age of retirement for those within the ELSA data set is 61 years for men and 59 years for women, with around two thirds of the individuals retiring within five years of these means (see Figure B.5). Both conform to well established patterns: Firstly, despite the mean age of retirement being before SPA, the single most common retirement age (modal age of retirement) is SPA (60/65 years). Secondly, both distributions are negatively skewed (particularly the men), i.e. a large proportion retire in the years leading up to SPA, with a relatively small proportion continuing to work post-SPA.

Figure B.5 Distribution of retirement ages



B.6.4 Contrasts by social grade

To explore support for hypothesised social grade effects, respondents were divided into three social grades, based on their most recent occupation. This division was derived by collapsing the Office for National Statistics Socio-Economic Classification (SEC) schema⁵⁰ to a three tier division.

Defined in this way, higher managerial/professionals amount to a relatively small proportion (14%) of the retired. The largest group is the middle income strata, of mid-range managerial and white collar workers (49%). The remainder (37%) comprises those employed in low paid, routine semi-/unskilled work (see Figure B.6).

⁵⁰ A detailed discussion of the rationale for, and practical way in which, the three classes were derived can be found in the Phase 2 report.

The ELSA question set also asks respondents to indicate their reasons for retirement (refer to Table B.3). The most frequently cited reasons for retirement for the low paid and low-skilled were: reaching retirement age, ill-health and redundancy. By contrast the middle income groups exhibit a wider range of, more evenly distributed, reasons. For the higher managerial/professional strata, volitional factors, such as ‘to enjoy life’ and wishing to spend more time with partner/family predominate (also see Phillipson and Smith, 2005).

While these data lend support to the premise of demographic differences by social grade in decisions over when to retire, any conclusions are subject, not only to caveats relating to the potential for hindsight (attribution bias)⁵¹, but also restriction of range, i.e. responders selected their answer from a set of given alternatives. Notable omissions from the list offered in the ELSA question set are some variables that lie beyond personal volition, e.g. restricted employment opportunities. Additionally, the data set offers little insight regarding the interplay of multiple factors, their relative importance or how this might impact on the age of retirement.

Figure B.6 Standard occupational classification collapsed to three strata

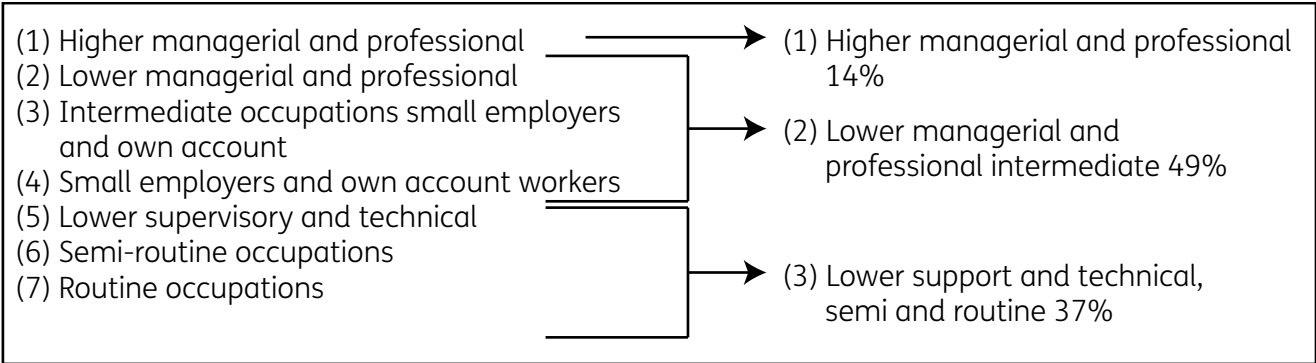


Figure B.7 overlays the diagram of hypothesised retirement ages shown in Section B.5.4.7 by the actual ages recorded in the ELSA data set. The ELSA data are shown as a box plot. The vertical line within each box represents the median age of retirement, the boundaries of each box representing the upper and lower quartile range, and the horizontal line the range (excluding outliers).

For the higher managerial/professional strata, the relatively greater choice they enjoy over how and when to retire appears to be reflected in their relatively broader spread for age of retirement. A notable feature is the lower mean, relative to the other groups. For the low-income, low-skilled strata, there is a similar spread of ages but a higher average age of retirement. Intuitive hypotheses here relate to push factors, such as ill-health and enforced redundancy, leading to early withdrawal and pull factors, such as modest savings or pension provision. The middle strata exhibit a more restricted range and a higher mean age of retirement, close to SPA. The middle strata contains a high proportion of State sector employees, however, the ELSA data set cannot support an exploration of private versus public sector profiles.

B.6.4.1 Predicting age of retirement by social grade

The focus here is on modelling reasons for retirement for the three social strata. The rationale here is that determining the relative impact of variables has implications for the scope, design and foreseeable impact of policy interventions aimed at different social grades.

⁵¹ There may be grounds for considering this to be a source of common error variance across all social strata.

This analysis was conducted by means of three multiple regressions, one for each social grade. The idea was to examine the influence each push/pull variable addressed in ELSA has on predicting the age of retirement, while holding the influence of all other variables constant. It also permitted an assessment of what proportion of the total variance in age of retirement the ELSA variables are able to predict. Table B.3 presents the results of this analysis. Each column contains standardised coefficients for each social strata. These indicate the independent effect of each variable, with numbers furthest away from zero denoting the strength of impact.

Table B.3 Self-reported main reason for retirement

	Lower paid and skill	Malleable middle	Managerial(
	(%)	(%)	%)
Reached retirement age	42.0	33.3	34.7
Own ill-health	15.1	13.0	6.7
Ill-health of a relative/ friend	2.8	8.9	7.3
Made redundant/ dismissed/had no choice	9.4	3.3	9.3
Could not find another job	.9	.8	1.3
To spend more time with partner/family	8.0	12.2	11.3
To enjoy life while still young and fit enough	7.1	13.8	20.0
Fed up with job and wanted a change	7.5	4.9	5.3
To retire at same time as husband/wife/partner	5.7	5.7	2.0
To retire at a different time to husband/wife/ partner	.5		.7
To give the young generation a chance	.9	4.1	1.3
Total	100.0	100.0	100.0

Figure B.7 Hypothesised and actual ages of retirement for the three social strata

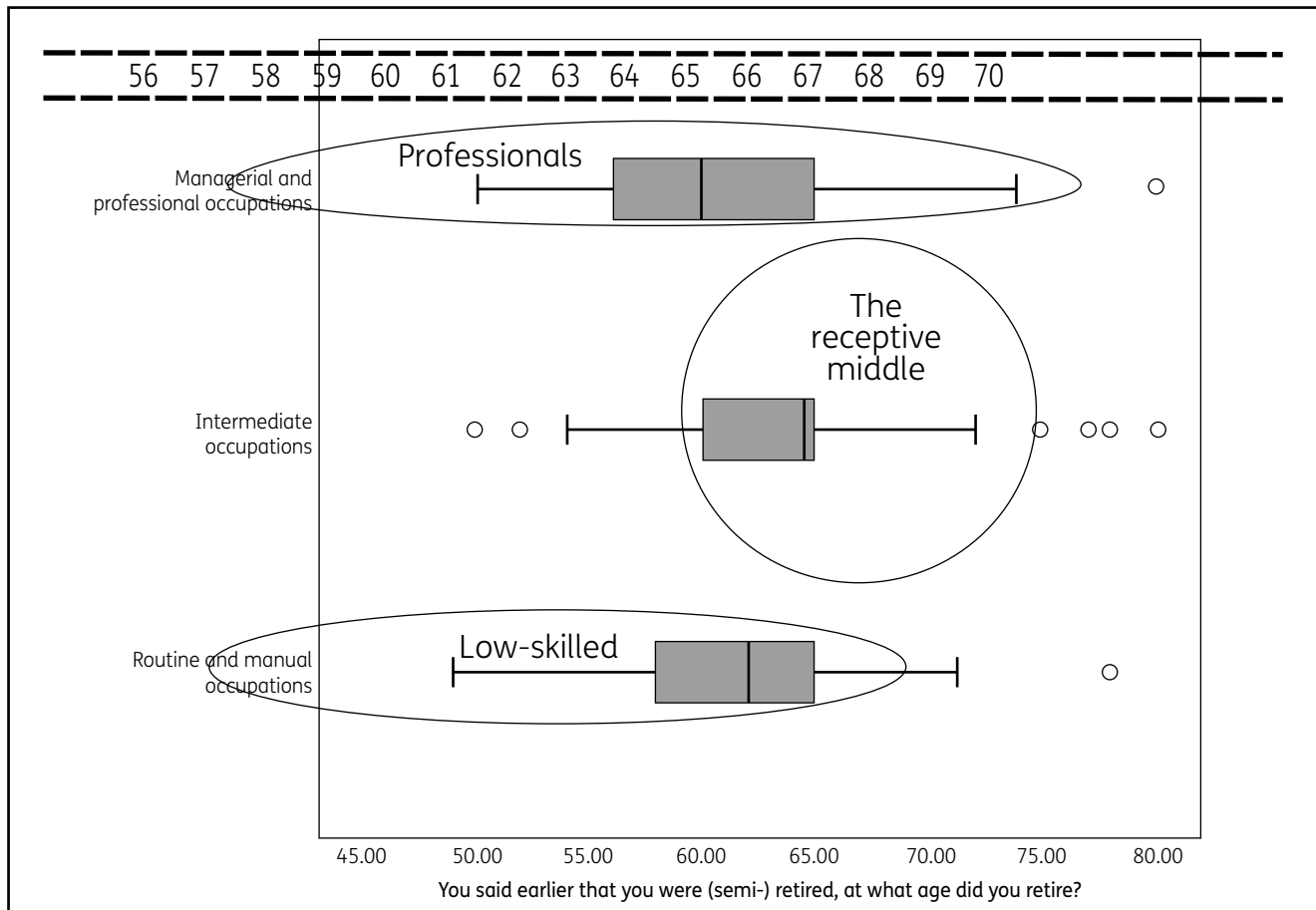


Table B.4 Predictors of age of retirement

Regression – push/pull factors as predictors of age of retirement			
Variables	Managers/ professionals	Middle income	Low income/ skill
Gender (male=1)	.25*	.19*	.31*
Single	reference	reference	reference
Coupled, partner working prior to retirement	.09*	.14*	.21*
Coupled, partner not working prior to retirement	-.06	-.03	-.22*
Health status while prior to retirement (longstanding illness = 1)			
Caring responsibilities prior to retirement	-.11*	-.10*	-.13*
Number of dependent children	-.01	.03	.01
Value of Pension	-.33*	-.17*	-.01
Value of assets	-.26*	-.16*	-.05
Flexible working	.18*	.09*	.09*
Satisfied in job	.12*	.07	.04
Made redundant (yes = 1)	-.12*	-.22*	-.33*
Employer pressure to retire/employer support (yes = 1)	-.06	-.00	-.10*
Low job quality (yes = 1)	-.09*	-.09	-.07*
R ² (variance explained)	.27	.11	.31

Notes: Sample size = 1,417. Sample is all individuals retired at wave 4 but not retired at any one of the previous waves (see Appendix A). Values in the columns are standardised betas. * indicates the effect of the variable is significant at the 5% level or higher.

Interpretation

Senior managers/professionals – pension value, size of assets are the strongest predictor influences on early (pre-SPA) retirement. Conversely, job satisfaction, flexible working arrangements are associated with later retirement.

Middle income – beyond withdrawal from work due to enforced redundancy there appear to be no notable predictors of early retirement for this group, in terms of the variables addressed.

Low income/low-skilled – suffering ill-health, enforced redundancy and the (non-)working status of spouse are all predictors of early withdrawal.

The R^2 value at the bottom of Table B.4 indicates the extent to which the variables included in the model explain the observed variation in retirement ages. For the managerial/professional and low-paid/low-skilled groups, around a quarter to a third of the variation is explained. In statistical terms, this can be considered a respectable proportion, but does indicate that the majority of variation in the spread of retirement ages within each strata remains unexplained, i.e. it is attributable to variables not addressed within ELSA.

Of particular note is the low R^2 (0.11) for the middle income strata. This indicates a poor fitting model and a poor ability to predict age of retirement. Looking at the individual variables, their effects tend to be weaker than for the other stratas. It is possible that the inclusion additional variables in ELSA would improve the fit of the model.

B.6.5 Conclusions

This analysis set out to examine the validity of the theoretical model advanced in Section B.5.4, in particular, differences in the relative influence of **push** and **pull** variables on retirement by social grade. It aimed to look at the prior role these factors had on retirement decisions rather than post-hoc respondent accounts of the reasons for retirement. As with any analysis of secondary data, the ability to test theoretical constructs tends to be limited by the range of variables available and the way in which these were operationalised. Given these constraints, the following tentative conclusions can be made:

- the average age of retirement is highest amongst the middle strata. This strata also exhibits less variability in the range of retirement age than the other strata;
- multivariate multiple-regression analyses showed that, to the limited extent that retirement ages can be predicted, the push/pull factors work differently for the different strata;
- possession of significant pension and asset values, perhaps unsurprisingly, appear to serve as an inducement to higher managerial/professional groups, suggesting that they are more likely to have chosen retirement;
- for those on low income redundancy (implicitly no choice or employer incentivised) plays a dominant role;
- middle income groups appear to be less prone (at least to date) to enforced redundancy and are unlikely to possess sufficient pensions and saving assets for these to significantly incentivise early (pre-SPA) withdrawal from work.

These findings afford corroborative support for the theoretical model advanced in Section B.5.4.

B.7 Mental models of retirement pensions and extended working life

Key findings

- There are significant gaps in people's knowledge over key aspects such as the impact of EWL on pensions and other benefits, and they are apt to fall back on simple rules of thumb rather than engaging in a systematic evaluation of options.
- People's beliefs, substantially accurate or otherwise, impact on their behaviour. There is a need to reinforce accurate understandings and tailor messages to address misunderstandings and gaps in knowledge.
- Most people tend to react to EWL options presented to them (or not) rather than actively seeking options.
- Primary orientations to EWL relate to broader attitudinal perspectives.
- Effective communication requires going beyond the technical properties of options (over EWL and pensions) to consider cognitive filters, e.g. trust in stakeholders and affective elements, e.g. challenges to notions of social justice.
- Engaging with public mental models requires consideration of five linked facets: cognitive orientation, emotional orientation, behavioural orientation (intentions), perceptions of stakeholders and structural factors.
- People view retirement as a just and deserved entitlement. Any erosion of this, particularly if it is interpreted as a forced option, is likely to meet with high levels of resistance and, potentially, outrage.
- Retirement is a period of uncertainty, particularly with respect to the spectre of age-related ill-health and worries over the sufficiency of income. People desire certainty. Configuring structural arrangements and communications that increase perceptions of certainty over income levels are likely to be effective in motivating positive EWL/pensions behaviour than those that seek to provoke anxiety.

B.7.1 Role and context

This section extracts insights from the review evidence-base to characterise public mental models of retirement, pensions and EWL. In characterising orientations to retirement, pensions and EWL, five key variables are considered: cognitive orientation, emotional orientation, behavioural orientation (intentions), stakeholders and structural factors. These represent the range of intrinsic and extrinsic influences that may inhibit or facilitate decisions.

Cognitive orientation – knowledge, awareness and beliefs. A key consideration in relation to cognitive orientation is the high level of uncertainty associated with the pertinent issues, e.g. the widespread uncertainty that is apparent in relation to financial provision and employment options, as well as health and other personal constraints on capacity for employment in later life, such as care of dependants.

Affective orientation – concerns feelings towards retirement, pensions and work. For, example, a key aspect of emotional orientation that predominates in the literature concerns the issue of trust and more specifically, lack of trust in many of the stakeholders that have/might have a role in promoting the pensions and EWL agendas. The authors of DWP 557 highlight the importance of understanding affective orientation before engaging with the public on these issues: '*... it seems extremely*

important to acknowledge the way that people feel already. Relentlessly upbeat messages that come across as unrealistic or not credible seem likely to be rejected and/or resisted – and might seem like propaganda (“they would say that”) (p.92).

Behavioural orientation (intention) – is influenced by both cognitive and affective orientations. Inertia appears to be the predominant feature of behavioural orientation in relation to retirement, pensions and employment, manifesting as a reluctance to seek information, make decisions or take action. This apparent apathy and disinterest appears to be exacerbated by the high levels of uncertainty over options and outcomes. It is worth noting that even where behavioural intentions are orientated in favour of saving for retirement and working longer, this does not mean that individuals will necessarily behave in line with their intentions (Wicker, 1969).

Social profile of key stakeholders – has implications for the extent to which they influence/ embody the potential to influence the public and their engagement with the relevant issues (the capacity to influence embodies both positive and negative potential to impact on public orientations and behaviour).

Structural factors – e.g. tax and benefit systems, availability of employment by type and region, impact on choices in relation to retirement, pensions and EWL. This includes the variety of personal, social, and cultural factors that may serve to facilitate or constrain decisions. *‘For many individuals decisions about these issues are made as a response to changing circumstances and in a specific domestic and family context. In sum, many of these decisions are not in this sense truly ‘individual’.*’ (DWP 531, p.123).

Figure B.8 provides a global representation of the key influences on decisions in relation to retirement, pensions and work. The relationship between the different variables is broadly characterised as stakeholders and structural factors impacting (positively or negatively) on cognitive, affective and behavioural orientations.

B.7.2 Segmenting the population

The public is not an homogeneous entity, thus, there are different considerations for different sub-groups. The main group difference for segmenting purposes appears to relate to occupation, which is also linked with educational attainment and socio-economic status (social class). Age is another potential source of difference regarding orientation, particularly with regard to pensions. Other potential segments, such as gender and ethnicity appear to be subsumed within difference by occupation type, employment sector, nature of employment contract (e.g. part-time or full-time) and educational attainment.

The literature highlights differences in the characteristics of the working population which broadly translate into three occupation-based groups along the lines of the three-category version of the current National Statistics Socio-Economic Classification (NS-SEC):

Group 1 – Senior managerial and professional occupations – are more likely to be financially prepared for retirement, either through occupational or private pensions. Decisions to work up to or beyond SPA are likely to be strongly influenced by levels of intrinsic job satisfaction. Financial incentives appear to impact through fairly widespread awareness of the benefits of pension deferral.

Group 3 – Low and unskilled occupations – are likely to have a high reliance on the State Pension to fund their retirement as the nature of their employment means they are less likely to have access to employer pension schemes. They are less likely to be oriented towards private pension schemes due to issues of complexity, a culturally normed focus on ‘living for today’ and limited income.

Group 2 – Intermediate occupations – clerical, administrative, sales/service, technical and auxiliary workers. This is a broad grouping and, while considered distinct in terms of its orientation to EWL and pension investment, individuals at either extreme are likely to share characteristics with groups 1 and 3.

Figure B.9 provides a characterisation of cognitive, affective and behavioural orientations to stakeholders. Orientations to an array of identified structural factors are incorporated across the different variables. Where there is evidence of sub-population (segment) differences these are highlighted. However, here and elsewhere, given the limitations of the base literature these should be treated broad-brush characterisations, rather than definitive. The following section distils this into three separate mental-models characterising public representations and orientation towards the three key issues: retirement, pensions and EWL.

B.7.2.1 Mental model of retirement (Figure B.10)

Retirement appears to have much greater salience for the public than EWL. The literature highlights a number of common features of orientations to retirement that have direct relevance to the EWL agenda. A common feature of how individuals view retirement concerns the perception of it as an externally imposed end to their working life that occurs at a fixed point, generally referenced to SPA. This perspective is characterised by the authors of DWP 557 as the ‘*cliff edge*’ view of retirement and is contrasted with an alternative, though less prevalent, view of retirement as a more flexible ‘*transitional phase*’ between full-time working and full-time retirement. The latter view appears to be most characteristic of Group 1. Although few readily identify with the concept of a phased retirement, a significant proportion appears to be attracted/receptive to flexible work (DWP 557).

The notion of choice in relation to the timing of retirement was not seen as relevant for many, particularly those in low or unskilled and low paying occupations (Group 3). There are fairly strong linkages between choice over the timing and nature of retirement and skill/social status. These individuals also tend to find work more intrinsically rewarding. ‘*Although there is a consensus about the desirability of choice as to when to retire or if to continue working, the ability to exercise choice is unevenly distributed.*’ (DWP 531, p.10).

In a similar vein: ‘*Many of our low income respondents expected to carry on working to SPA and beyond, or were at least resigned to the idea ... they were also often resentful (and even angry).*’ (DWP 557, p.95).

Cultural expectations and norms are derived from a variety of sources, including, the State, employers, family and peers. The widespread perception of a ‘set retirement age’ appears to constrain active consideration by individuals over when to retire (DWP 673). For older women, employment patterns and early exit from work are more likely to be influenced by domestic relationships and commitments outside the workplace. There is also evidence that some women time their retirement to fit with their partner (Lissenburgh and Smeaton, 2003).

Figure B.8 Key influences on retirement decisions

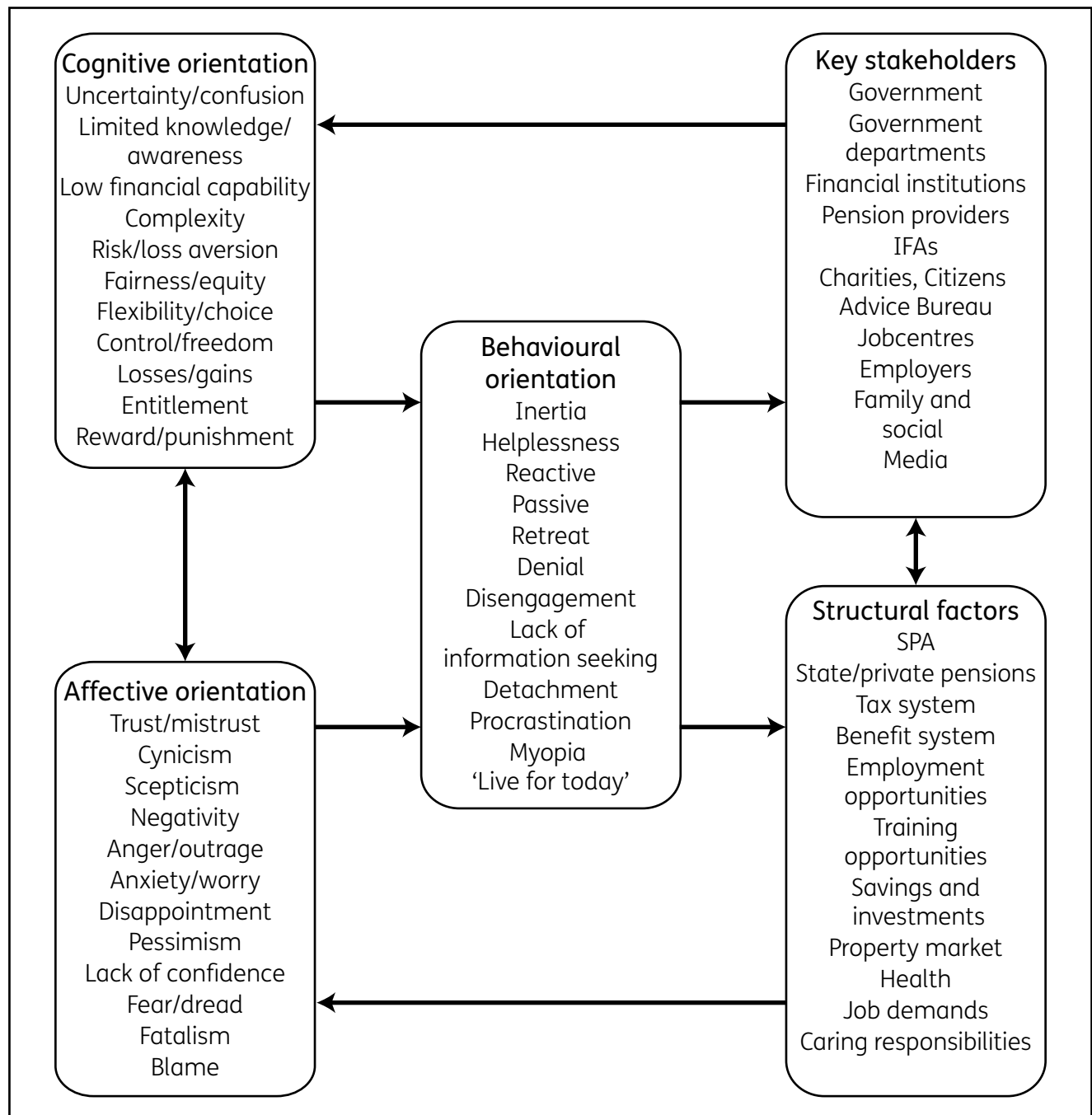


Figure B.9 Cognitive, affective and behavioural orientations to stakeholders

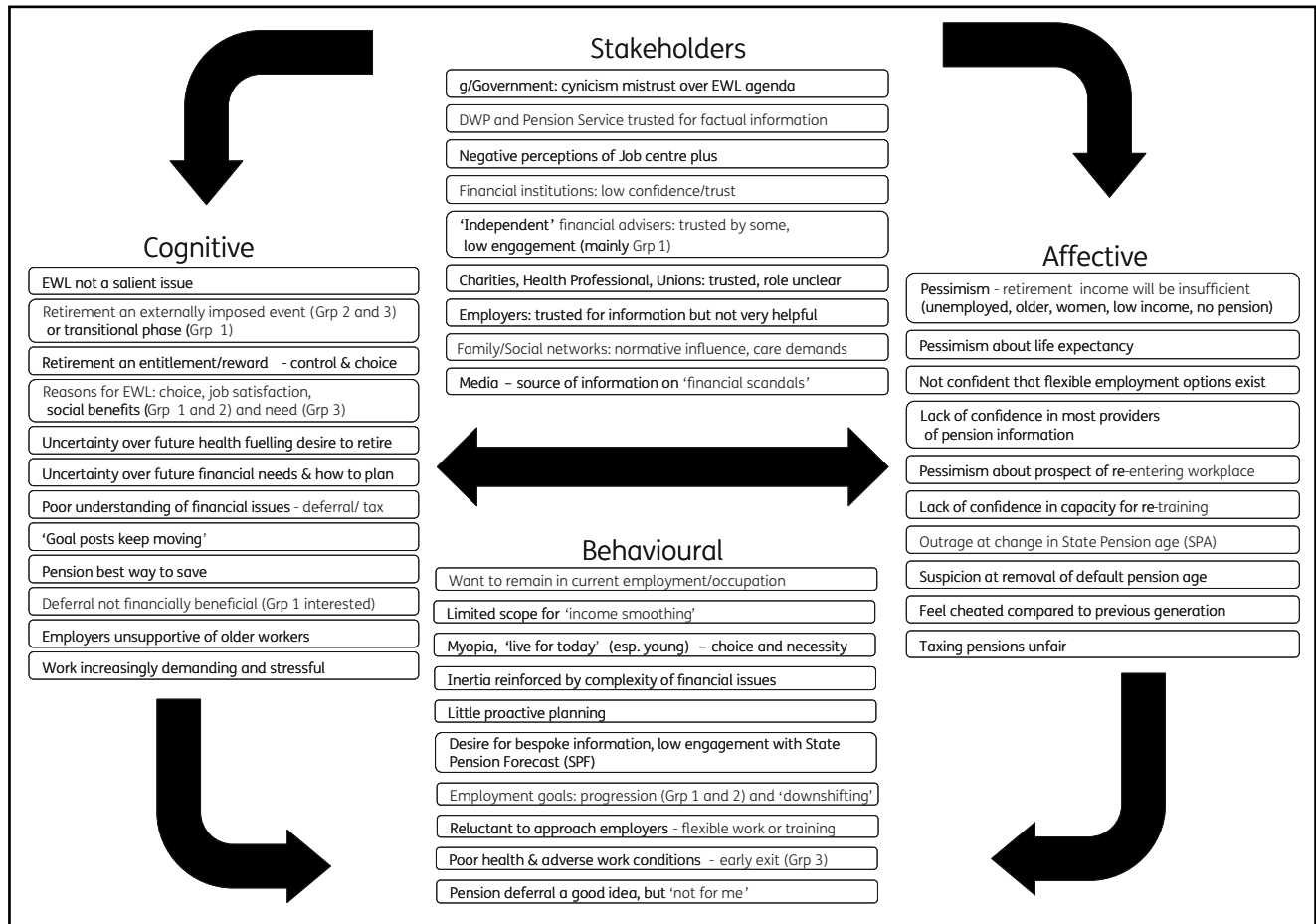
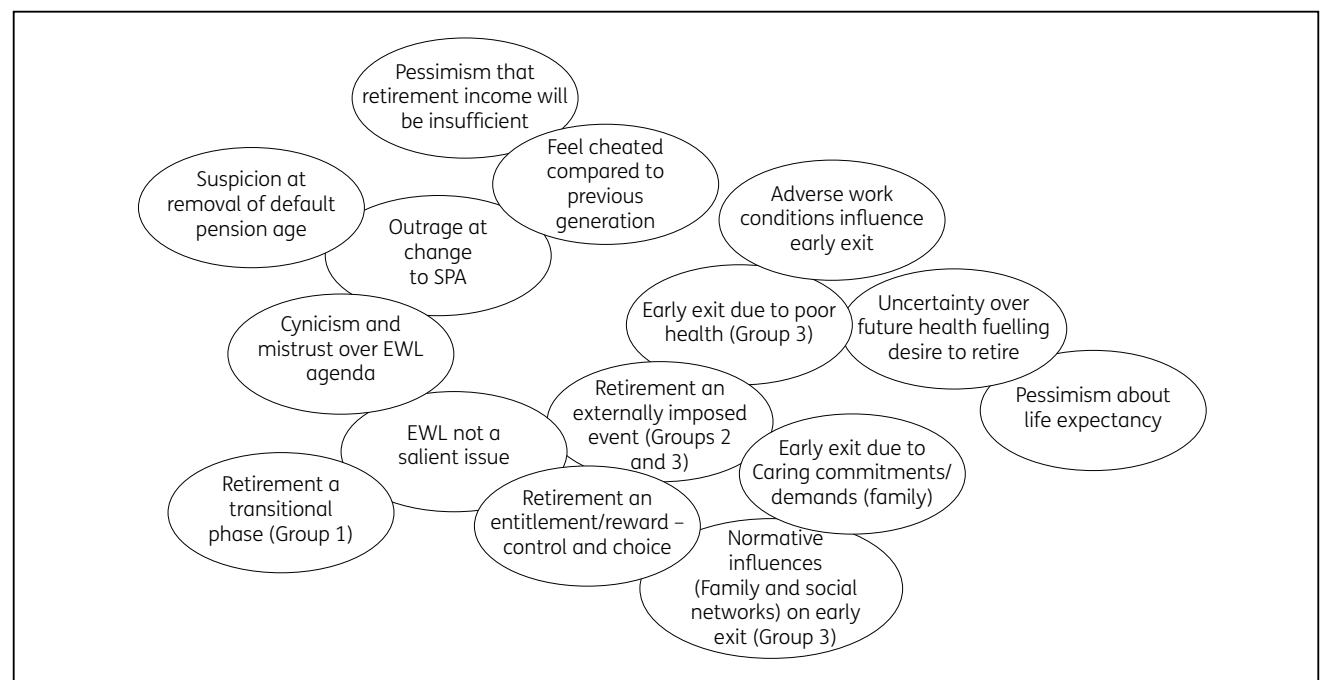


Figure B.10 Mental model of retirement



The view of retirement as a fixed event is reinforced by the influence of cultural expectations and norms from a variety of sources, including, the State, employers, family and peers. The widespread perception of a 'set retirement age' appears to constrain active consideration by individuals over when to retire (DWP 673). For older women, employment patterns and early exit from work are more likely to be influenced by domestic relationships and commitments outside the workplace. There is also evidence that some women time their retirement to fit with their partner (Lissenburgh and Smeaton, 2003).

A strong theme in the literature is the perception of retirement as an entitlement and deserved reward for a long working life (DWP 531). The end of working life is regarded by many in positive terms as desirable, with early retirement or stopping work before SPA widely perceived as 'good' or a 'bonus'. A survey of retired respondents identified the top three reasons for not wanting to work past statutory pension age as: *'I deserve my retirement'; 'not well enough' and 'just don't want to work'* (EHRC 43, 2009, p.61). There was considerable agreement regarding the benefits of retirement, specifically, autonomy, choice and freedom from enforced routine. *'Most respondents felt that the defining characteristic of retirement lies (or should lie) in taking control of their own life and choosing for themselves how to spend their time.'* (DWP 557, p.22).

It is apparent that aspirations to retire early (e.g. in their 50s) are based on the perception of early retirement as having become the norm. Conversely, working beyond SPA appears to be perceived as a 'penalty'. A consistent theme in the literature concerns resistance to the notion of being made to work longer. Compulsory extensions to working age are viewed negatively either where there is an expectation of early retirement or retirement at a previously specified SPA. Such changes evoke feelings of outrage and being cheated compared to the previous generation (EHRC43, DWP 531, DWP 557). Those affected feel angry at the loss of the free time they feel entitled to. These negative sentiments were often directed at the Government and fuelled public cynicism and mistrust in relation to the Government's motives for targeting retirement, pensions and EWL. *'Blame for the prospect of having to delay retirement was often directed at the Government and the pensions industry. Many felt disappointed, angry and betrayed – and cynical about communications from Government on the subject.'* (DWP 557, p.2).

The equalisation of SPA for men and women was perceived as being driven by a desire to get people to work for longer. Even though men tended to be more in favour on the basis of equity and fairness, the preferred option would have been to lower the SPA of men to match that of women (DWP 531). Feelings of suspicion were also evident in relation to the removal of mandatory pension age, which was viewed in negative terms as an imposed change rather than a positive opportunity. This associated mistrust is likely to influence perceptions of any messages from g/Government on the subject of retirement, pensions and EWL.

The literature revealed some contradictions in perceptions of retirement. On the one hand retirement is highly valued for the freedom to pursue your own interests, on the other it embodies negative feelings of apprehension over the prospect of financing this and worries over health (DWP 531, DWP 557). Notably, while many are unable to estimate how much income they will need to finance retirement, most harbour misgivings over the sufficiency of their arrangements. Although many individuals express a desire to retire before SPA, routinely they take very modest steps to plan for this financially. *'Even for those whose financial situation and health status was not currently a worry, the risk of things going wrong was a very powerful element of how people felt about work and retirement.'* (DWP 531, p.80).

Uncertainty over future health status appears to fuel the desire to retire early and a common reason identified in the literature for intending to retire before SPA was in order to enjoy retirement while still in good health. *'Individuals cannot be certain how long their good health will continue and therefore base decisions, such as early retirement, on the possibility that their health may deteriorate.'* (EHRC43, p.77).

Despite widespread evidence of increases in life expectancy at a population level, at an individual level there are widely held concerns about personal health and well-being post-SPA that favour an early exit from employment. The authors of DWP 557 advise caution when framing arguments about working longer in terms of longevity as although individuals appear to be aware of increasing longevity, they do not necessarily believe it will apply to them and the misfortune of others tends to be highly cognitively available.

‘... many ... knew someone or knew someone who knew someone who had not had a decent retirement ... despite acknowledgement that statistically we are all living longer, many of the respondents held pessimistic views about life expectancy based on the experiences of those around them.’ (DWP 531, p.80)

Poor health is acknowledged as a factor influencing an early exit from the workplace, particularly for those in low-skilled occupations (Group 3). Men in lower paid manual work were less likely to be considering retirement before SPA but were the most worried about their physical health impacting on their ability to work and enforcing an early exit (DWP 557). ‘... there are often doubts about how long they would be able to cope with jobs as age increases – particularly where stress, physical labour and mental sharpness are involved.’ (DWP 557, p.37).

B.7.2.2 Mental model of pensions (Figure B.11)

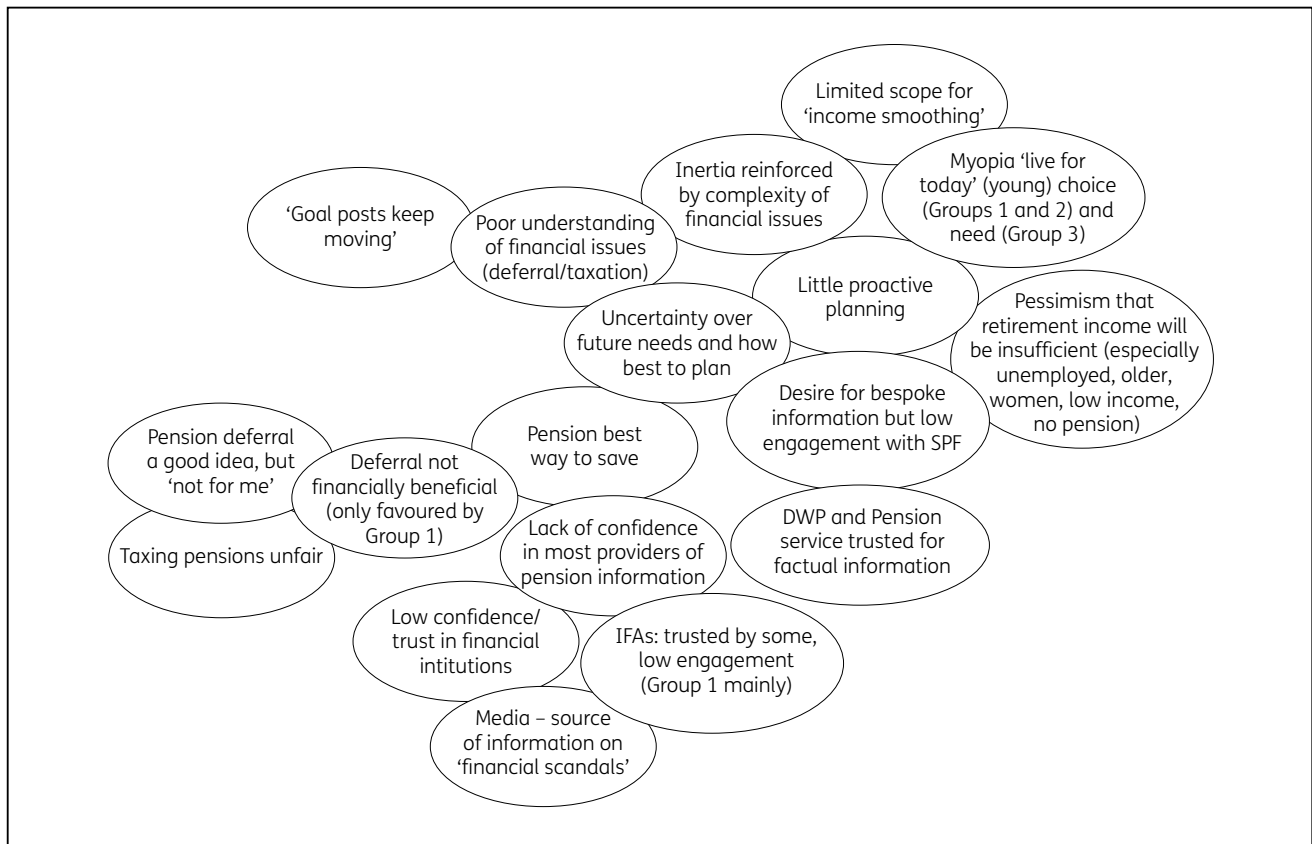
A number of studies claim that there is a widespread public acceptance of the need for financial provision for retirement, though there was some divergence of opinion as to whether this is the responsibility of individuals or g/Government (DWP 434). The former view is more prevalent amongst higher income respondents. There is considerable consensus over a widely held perspective that the State should provide a minimum subsistence level of financial provision in retirement. There also appears to be broad acceptance that the g/Government should encourage saving for retirement, though there was less agreement on the g/Government’s role in providing advice on how individuals should do this.

Pensions are widely regarded as the most effective way to save for retirement. However, there is notable pessimism over pensions providing sufficient income in retirement (NAPF, 2010). Levels of worry over retirement income are, unsurprisingly, higher amongst those out of work, older people, women and those on low income or with no pension provision, which is likely to reflect the fact these groups have least control over enhancing their retirement income. For women there are specific concerns about the impact of career breaks on their pension (DWP 557 and DWP 434).

There is widely cited evidence of an erosion of confidence in pensions (NAPF, 2010; DWP 557; DWP 562). Of the range of available pension providers respondents were most confident in employer pension schemes, although there are substantial differences between public and private sector employees (DWP 434). Trust in pension providers is characterised in terms of competence and care. Whilst financial institutions are regarded as having greater financial competence, non-profit organisations, the Government and employers are more highly regarded in relation to care and security of investment (DWP 434).

Despite apparent worries over retirement income and rational arguments about why it makes sense to save for retirement, there is little evidence of any proactive financial planning for retirement and EWL. Widespread inertia has been characterised as a key feature of behaviour in relation to this issue as *‘... estimates show that seven million people are not making provision for retirement that they, themselves, would be likely to consider sufficient.’* (DWP 562, p.9). Younger respondents (under 25 years) appear to regard retirement as too far off to even think about saving for it and expressed an expectation to retire later (DWP 434). The authors of DWP 557 suggest there is a sense of denial about the financial perils of under-financed retirement. The public are also characterised as reacting to events as they unfold in the context of incomplete knowledge or understanding of their own pension status and of the prevailing policy situation (DWP 531).

Figure B.11 Mental model of pensions



The concept of 'income smoothing' (DWP 562), core to the life cycle model of income provision, assumes that individuals are: forward looking; can predict the financial resources they will have over their lifetime; can understand the amount they will need to save; and can make informed choices over financial options. The overwhelming picture from the literature is of widespread uncertainty over future needs and how best to plan as much of the necessary information is unknown. This uncertainty limits the scope for 'income smoothing'. *'... we typically found a poor grasp of their likely entitlements; misgivings about what they will get; limited understanding of how things work; uncertainty about how the system will operate in the future; and a sense that the system is failing.'* (DWP 557, p.2). Similarly, *'Overall, there was a sense that the goal posts kept moving and it was quite difficult for the individual to do the right thing.'* (DWP 531, p.84)

A further challenge to income smoothing, characterised by some commentators as 'myopia' (DWP 562) or short-sightedness, is the widespread predilection to spend now rather than save for the future. DWP 294 identifies 'living for today' as a specific characteristic of younger employees. For those with greater financial resources decisions to 'spend' or 'save' may, to some extent, be construed as a choice but for those with low income a focus on present rather than future tends to be more salient. The literature also highlights the presence of inducements that favour instant rather than deferred gratification, such as offers of a lump sum payment for early retirement and pension payments. *'The most frequently expressed view centred on the uncertainty of future circumstances and in particular health. Allied to this was a more general sense of the importance of living for the moment at this point in one's life.'* (DWP 531, p.98)

The general picture regarding pensions is of poor understanding and limited knowledge, e.g. 74% of respondents in DWP 434 said pensions issues were too complicated to understand or know the best course of action. This confusion and uncertainty appears to be a characteristic of both State and private pensions (Retirement Planning Monitor, 2005). Complexity, poor awareness and limited

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understanding of pensions products, combined with the unpredictability of future needs and resources have been identified as contributing to confusion, helplessness and inertia. *‘One of the most prominent and consistent themes running through the literature on pensions... is individuals’ lack of understanding of pensions.’* (DWP 562, p.19).

The literature suggests that poor awareness and understanding of pension products combined with the unpredictability of future needs and resources leads to uncertainty, fuelling inertia and inaction (DWP 562). There is also uncertainty regarding potential returns from different savings or investment options and potential changes in Government policy. SPA was formerly viewed as fixed, but changes in recent years may have contributed to uncertainty, accompanied by feelings of helplessness and fatalism.

A further barrier concerns the apparent lack of widespread active consideration of the financial implications of working versus retirement. The option to defer receipt of a pension is relevant to EWL but understanding of pension deferral options, either State or private, and the associated taxation issues appear to be very limited (DWP 557). Beliefs about the impact on future taxable income and benefits appear to contribute to the view that it is not financially beneficial, leading to reluctance to take up this option. On balance, the evidence indicates that tax relief is not a significant motivator to invest in pensions (DWP 434; Blundell et al., 2006). The authors of DWP 557 recommend that any tax incentives designed to motivate individuals to invest in pensions or work longer need to be obvious and easy to understand.

Most people appear to have a poor understanding of financial issues relevant to pensions and saving for retirement. This includes basic financial concepts such as compound interest, resulting in erroneous assumptions that it is possible to compensate for low contributions made during the early part of their working life by paying more in the latter part (DWP 434). They are also likely to struggle to make sense of information regarding the financial benefits to be derived from working beyond the point at which they become eligible for pension payments (pension deferral). Differences in education level have some impact on perceived understanding of pensions but even a high proportion of those educated to degree level find it too complicated (DWP 492). *‘... both the behavioural barriers to savings and the costs of provision have been made worse by the bewildering complexity of the UK pension system, state and private combined.’* (Pensions Commission 2004, p.205).

The main objection to deferral was *‘... based mainly on the belief that it was better for people to take the pension at the first available opportunity as the future was uncertain.’* (DWP 531, p.7). Of those that thought that pension deferral was a good idea, in principle, the vast majority were not considering deferral for themselves (DWP 531). This highlights a caveat regarding responses to such hypothetical questions where respondents are positively disposed to certain options but will not necessarily take up these options themselves.

A number of potential sources of EWL/pensions information are identified in the literature including: g/Government; financial institutions; family and friends; advice agencies, employers; health professionals; trades unions; and the media. *‘Respondents’ evident sense of having been misled and let down over pensions by both the Government and the pensions industry is a thread which runs though many of our findings.’* (DWP 557, p.101)

The DWP is by and large trusted to provide technical information about State Pension entitlements, but it is not regarded as an impartial source in relation to advice and information over EWL (DWP 557). There appears to be a general mistrust of financial institutions. Banks and building societies are not regarded as a trustworthy source of information due to perceived commercial motivations (DWP 557). *‘A key theme to emerge was a legacy of bitterness and mistrust over pension issues. This*

is a generation that has experienced some of the worst ‘financial scandals’ to date and there was considerable uncertainty and anxiety about the whole issue of pensions.’ (DWP 531, p119).

The literature highlights conflicting findings regarding trust in IFAs. There is evidence from different sources that IFAs are trusted, even though only a small proportion of respondents had actually sought information from them (DWP 562 and DWP 434). It seems that the notion of IFAs as independent affords them higher status in terms of trust. In contrast, DWP 531 highlights scepticism targeted at financial advisers, pension providers and the g/Government.

Some regard employers as being able to contribute to employment options and retirement planning, however, this was not widespread. There are very few reports of employers offering pre-retirement planning advice. Trades unions appear to enjoy a positive trust profile in this domain, but do not appear to be seen as a primary source on the EWL issue. Advice agencies such as the Citizens Advice Bureau, age concern, disability groups, welfare rights and law centres, GPs and other health professionals all engender high trust, but have no discernible profile as a source of information and advice over EWL or pensions.

Despite widespread mistrust of mass-media sources, these remain a primary and influential information source. Respondents in DWP 438 cited the media as fuelling mistrust in private pensions, specifically media stories about failing pension funds. The more recent financial crisis associated with the banking sector may be expected to have undermined confidence in these institutions. Media, personal experiences and social networks have fuelled negativity and concerns over pensions including doubts that the State Pension would be maintained or at a worthwhile level. (DWP 557 and DWP 531).

B.7.2.3 Mental model of EWL (Figure 6.5)

As noted elsewhere, the concept of EWL is not highly salient to most people and, consequently, is a topic on which few actively seek out information. *‘Our respondents did not generally have an agenda for getting information about extending their working lives, so that any information the Department puts out on this subject will not find an audience eagerly waiting to collect and digest it.’ (DWP 557, p.114).* This poses a significant challenge to public policy communication interventions.

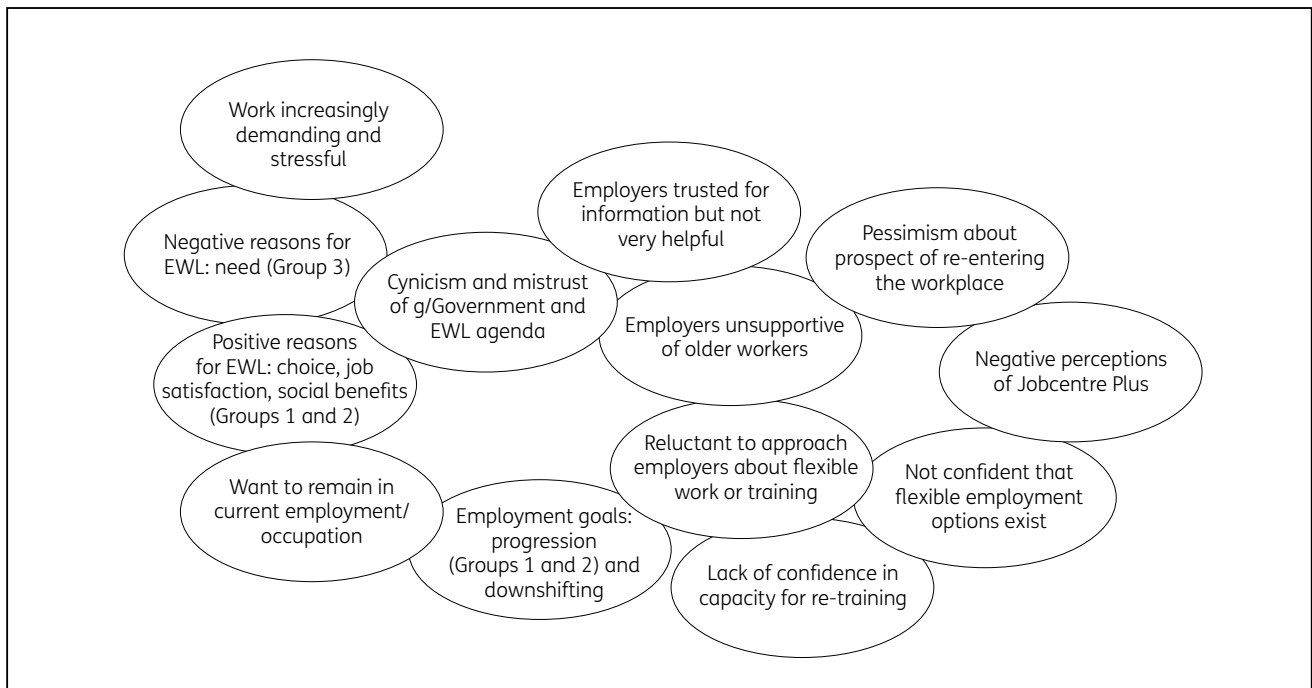
Beyond absolute necessity, financial incentives appear to have a modest motivational impact on orientation to EWL (DWP 531). Intrinsic satisfaction and social benefits seem to be more salient, or perhaps more accurately, it seems that financial incentives have a modest impact where the former are not positively framed (EHRC 43) and where work is made unattractive by its design and configuration, e.g. long hours, high job demands. *‘The high incidence of stress reported ... has significant policy implications in terms of the extending working lives agenda ...’ (EHRC 43, p.xi).* Shift working is not regarded as desirable and appears to increase the desire to withdraw from work. *‘There was a reluctance to work ‘antisocial’ hours in part-time jobs.’ (DWP 531, p.73).*

The apparent attractiveness of flexible working does not just concern a reduction in working hours but also the distribution of hours. However, the prevailing view is that such opportunities are limited and, therefore, flexible working is not viewed as a viable proposition. Although a significant proportion of respondents in DWP 557 expressed interest in phased withdrawal from employment, few believed that their employers would offer this level of flexibility. This is consistent with findings from a number of studies that indicate general support for the idea of flexibility and choice in later working life, tempered by the perception that it is an option that is only open to a narrow band of employees, occupations and sectors (DWP 299, DWP 557).

Although there appears to be notable interest in the possibility of flexible working and gradual retirement, there appears to be limited knowledge of potential options available and employers do not appear forthcoming with information on this (DWP 531). *‘There was a lot of interest in the*

possibility of flexible working and gradual retirement [but] ... there was a sense that employers did not provide very much information [on this] ... hence people didn't know whether gradual retirement was available to them or not.' (DWP 531, p.75).

Figure B.12 Mental model of extending working life



The literature also identifies a general reluctance on the part of older employees to approach employers about flexible options. For some this is characterised as a lack of confidence (EHRC 43). Others expressed concerns about how employers would perceive such an approach and whether expressing a desire for reduced hours or part-time working might be interpreted as a lack of commitment, which might then threaten their future job prospects/security (McNair, 2007).

DWP 299 concludes that ‘Access to training and continuing education remains a crucial issue for older workers.’ (p.76). An apparent lack of engagement with training has been attributed to an absence of opportunities and a lack of willingness to engage with training (Newton, 2006; DWP 299; McNair, 2007). DWP 557 highlights a lack of orientation to education and training amongst older workers and a preference for utilising their existing skills rather than acquiring new ones. A lack of confidence and negative self-perception has also been identified as barriers to take-up (DWP 557). The perception of employers as unwilling to invest in training older workers is also identified as a challenge to skills enhancement for older workers (Taylor and Unwin, 2001). The literature is very limited on details regarding the actual nature of training options.

6.3 Conclusions

Decisions about whether to retire or extend working life beyond SPA are beset with multiple uncertainties, making predictions and planning difficult. This is exacerbated by a general lack of motivation for any kind of active and purposeful information-seeking in relation to retirement, pensions and extending working life. ‘... few people use information gathering routinely or systematically as a starting point for planning and decision-making – certainly [not] in relation to broad topics like extending working life, which is an amorphous topic that people typically have little motivation to explore.’ (DWP 557, p.99).

Engagement with these issues can be characterised as a passive process of acquiring information in an ad hoc manner from different sources, including the mass media (DWP 557). However, the challenge in attempting to engage the public is not simply to provide correct factual information but to also address issues of salience and motivation. ‘... most admitted that they would not have sought out material on this subject in real life – or probably even read it if it had been handed to them or dropped through the letterbox.’ (DWP 557, p.112).

B.8 Cognitive and socio-cognitive behaviour change influence models

Key findings

- The models have been most widely applied in public health contexts, particularly in the context of lifestyle (risk) choices.
- They focus on individuals at the unit of change, rather than the contextual (structural and socio-cultural) elements. In this respect they contrast with the nudge perspective, but both could be used in a complementary manner.
- They are rooted in the rational choice perspective, i.e. the assumption that human behaviour is the product of a rational appraisal of the costs and benefits of different actions.
- There is quite strong evidence that they can play a role in changing peoples’ orientations to issues, e.g. risks to their future well-being. However, their impact tends to be modest in the presence of strong structural and cultural counter-influences.
- Claims of their impact on behaviour are to be dominated by findings reporting rates of behaviour intention (rather than behaviour).
- **Stages of change** approaches have been widely adopted, however, there is limited evidence that a staged approach is superior to alternatives.
- There is potential utility in the use of the stages of change concept as a way of segmenting the population to provide a focus for policy thinking over intervention strategy.

B.8.1 Overview

Cognitive and socio-cognitive (psychology) behaviour change models can be traced back to the 1970s and have been widely reviewed across Government departments over the last decade. Their attractiveness to policy-makers lies in the promise of migrating people along a pathway of change to more ‘desirable’ behaviour. They have been most widely applied within the public health domain, e.g. smoking cessation, healthy diet, reducing alcohol consumption, the context from which they emerged, but have been a feature of policy agendas in education, crime prevention, occupational health and elsewhere.

Here, we consider the scope for applying these models to EWL and pensions behaviour change agendas. The account offered here gives an overview of the most widely used models. For a detailed account of the perspective see the reviews conducted by the National Institute for Health and Clinical Excellence (NICE) (2007) and the Health and Safety Laboratory (HSL) (2005).

At their core is the premise that behaviour change is a product of the individual coming to recognise the risks to future well-being associated with certain behaviours, recognising that they need to change their behaviour to reduce the risk and take steps to achieve this (behaviour change). The models seek to find ways of motivating/supporting people through the change process. This

takes various forms, ranging from producing communication material, typically, designed to raise awareness of harm, routinely emphasising gains from reducing personal vulnerability to negative outcomes, to helping people to configure personal action plans.

They share a focus on individuals as the unit of change, i.e. they focus on motivating changing behaviour directly, rather than indirectly through changes to the context in which people operate. Here we can observe a key contrast with the more recent nudge perspective (Thaler and Sunstein, 2008) which, beyond taking advantage of fallibilities in human decision-making highlights the role of the decision-making context, or **architecture** (see Section B.9). In the case of the latter, the emphasis is on configuring structural environmental variables to encourage people to behave in **desired** ways. In the context of nudge, the primary focus of the theory of change is on the decision-making context. From the socio-cognitive perspective, change in the individual represents the core focus.

It is important to keep in mind that while decisions over EWL and saving for retirement embody volitional elements, i.e. people have a degree of choice and options interact with an array of personal, circumstantial and structural factors.

B.8.2 Cognitive and socio-cognitive models of behaviour change

The behavioural sciences have produced an array of models and theories of behaviour change, with varying degrees of explanatory and predictive power.

Key distinctions relate to the:

- weight they accord to rational as opposed to irrational factors; and
- extent to which they focus on the role of free will or determinism as the driver of behaviour change.

B.8.2.1 Rational choice theory

Underpinning all rational choice perspectives is the assumption that human behaviour is primarily determined by a rational appraisal of the costs and benefits of different actions, e.g. in a market consumers are expected to make a rational trade-off between the utility of a commodity and its price. The assumption is that individuals will always choose to maximise their benefits and minimise their costs and that this trade-off can be modelled mathematically, to reveal which choice or behaviour will yield the maximum utility. However, a limitation of the approach is that it does not attempt to explain human motivations, beyond the relatively narrow parameters of financial costs and benefits.

This failure to explore why individuals vary in their ascriptions of utility, i.e. why they value outcomes differently, limits the predictive power of the approach and can make its logic rather circular. That is, if we claim that individuals take rational action to maximise the outcomes that they value, but that we can only know what they value by looking at the choices they have made, then it is not apparent how our understanding of their behaviour or our capacity to predict it has been enhanced. The approach has also been criticised for assuming that individuals have perfect knowledge of the consequences that will result from different choices, or the cognitive competence to compare relative costs and benefits. These criticisms have led to consideration of the constraints on rational choice ('bounded rationality'), and behavioural economists have begun to use psychological insights into human motivations and behaviour to move beyond the assumptions embodied in rational choice theory.

B.8.2.2 Social cognitive theory

Socio-cognitive perspectives focus on the way in which people's thoughts influence their behaviour, placing particular emphasis on the role of social learning. Through interaction with the material and social world individuals are held to develop personal characteristics, learn from the reactions of others to their behaviour and recognise which environmental constraints on their behaviour can be successfully challenged.

Central to the perspective is Bandura's (1977) concept of self-efficacy, i.e. the individual's subjective appraisal of their capacity to perform a particular behaviour or task, for example, to quit smoking or perform well in an exam. Beliefs about self-efficacy are said to be acquired through social experience, including reflecting on the consequences of our own attempts to behave in a particular way, and by observing the consequences of other people's behaviour, (particularly if we identify strongly with the people we observe), i.e. modelling our behaviour on others.

The perspective holds that self-efficacy can be promoted and enhanced through intervention e.g. offering guidance and support. Socio-cognitive perspectives can be viewed as an advance on rational choice perspectives, in so far as they broaden the array of influences considered. However, they remain vulnerable to the core criticism of the former in restricting the focus to cognitive elements, i.e. there is limited consideration of social, cultural or structural influences on behaviour.

The most enduring legacy of this perspective is its incorporation into value expectancy and stages of change models.

Theory of planned behaviour and theory of reasoned action

The theory of planned behaviour ((TPB), Ajzen, 1985), while remaining an essentially cognitive model focused on the individual as the unit of change, lays claim to taking account of social, cultural and structural influences. The theory has its origins in the earlier theory of reasoned action ((TRA), Ajzen and Fishbein, 1980).

At the core of TPB is the premise that an individual's **motivation** for behaviour change is a function of **attitude** (whether or not the individual evaluates the behaviour as positive) and **subjective norms** (whether the individual believes that significant others want them to perform the behaviour).

Central to Ajzen's reformulation was the recognition of the role of **self-efficacy** and **outcome expectancy**, derived from socio-cognitive theory, i.e. the extent to which individuals believe that they are personally capable of achieving behaviour change and their belief in the likely outcome of their attempts to do so. Ajzen combines these concepts into perceived behavioural control. Figure B.13 illustrates the relationships between the key concepts that comprise the TPB.

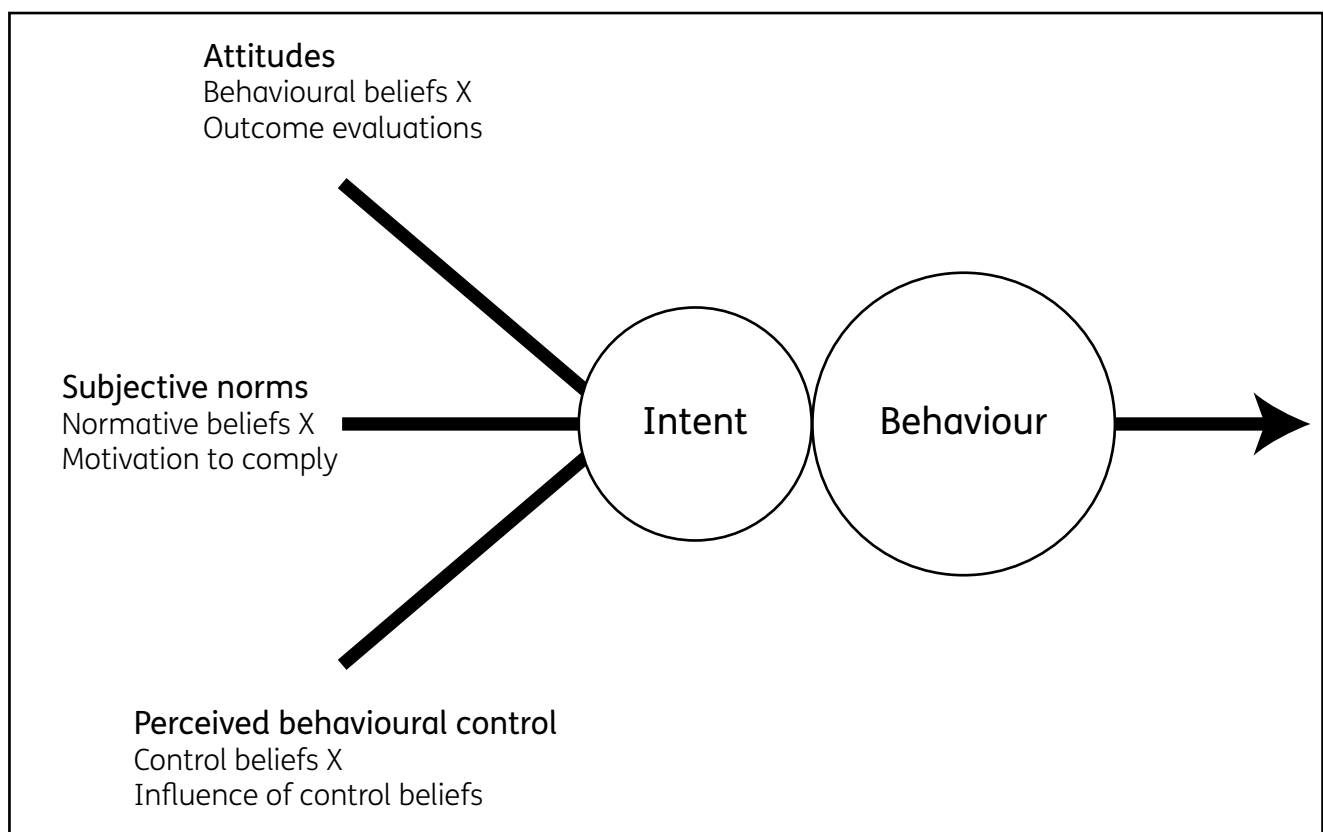
The theory is concerned with the relationship between an individual's intentions and behaviour and the factors that combine to influence intentions. Within the model, factors assumed to influence behaviour are:

- the individual's **attitude** towards the behaviour, i.e. whether gains are perceived to outweigh the losses, weighted by the perceived likelihood of success or failure;
- the presence of social pressure to perform (or not perform) the behaviour, i.e. does the behaviour meet with social approval? Ajzen describes this as **subjective norms**; and
- **perceived behavioural control**, the extent to which the individual perceives that they have sufficient control over the internal and external factors that affect achievement of the behavioural goal.

In this iteration of the model, perceived behavioural control is very close to Bandura's notion of self-efficacy, i.e. it focuses on the individual's belief in their ability to exercise control over internal and external factors and how this belief impacts on intent. However, in his 1985 paper Ajzen quite clearly states that these internal and external factors can directly constrain behaviour, not just by diminishing intent. This can be viewed as a significant advance, embodying the recognition that no matter what intentions or plans for behaviour the individual might subscribe to, there is potential for them be hijacked by factors that lie beyond the individual.

Many of the external factors that really do constrain individual volitional behaviour, e.g. institutions, laws, the distribution of resources, are themselves the product of human practical activity, albeit collective rather than individual, and as such are located within an historical process of reproduction and transformation. The TPB has nothing to say about this. Instead, it posits an asocial actor pursuing individual volitional plans within the constraints of a largely fixed and immutable external world.

Figure B.13 Theory of planned behaviour⁵²



Ajzen also has little to say about the process of behaviour change, beyond stating that the relationship between planned behaviour and actual behaviour is likely to weaken as the lapsed-time between them increases. Others have argued for a more sequential model of the process of behaviour change.

⁵² Source: <http://johnnyholland.org/2011/01/24/the-a-b-c-of-behaviour/intent-behaviour/>

Transtheoretical model

The transtheoretical model (TTM), Prochaska and DiClemente, 1977), so named because it draws upon a wide range of different psychosocial models, claims that the process of behaviour change can be conceptualised as five sequential stages (see Figure B.14):

- Stage 1 **Precontemplation** – people have no plans to change their behaviour and may not feel the need to do so;
- Stage 2 **Contemplation** – people are planning to change in the next six months and may be more aware of the benefits of changes;
- Stage 3 **Preparation** – people are preparing to take action in the next 30 days and may be taking small steps towards change;
- Stage 4 **Action** – people have changed their behaviour for up to six months and are trying to strengthen their commitment to the change;
- Stage 5 **Maintenance** – people have changed their behaviour for at least six months and are engaged in strategies to avoid relapse.

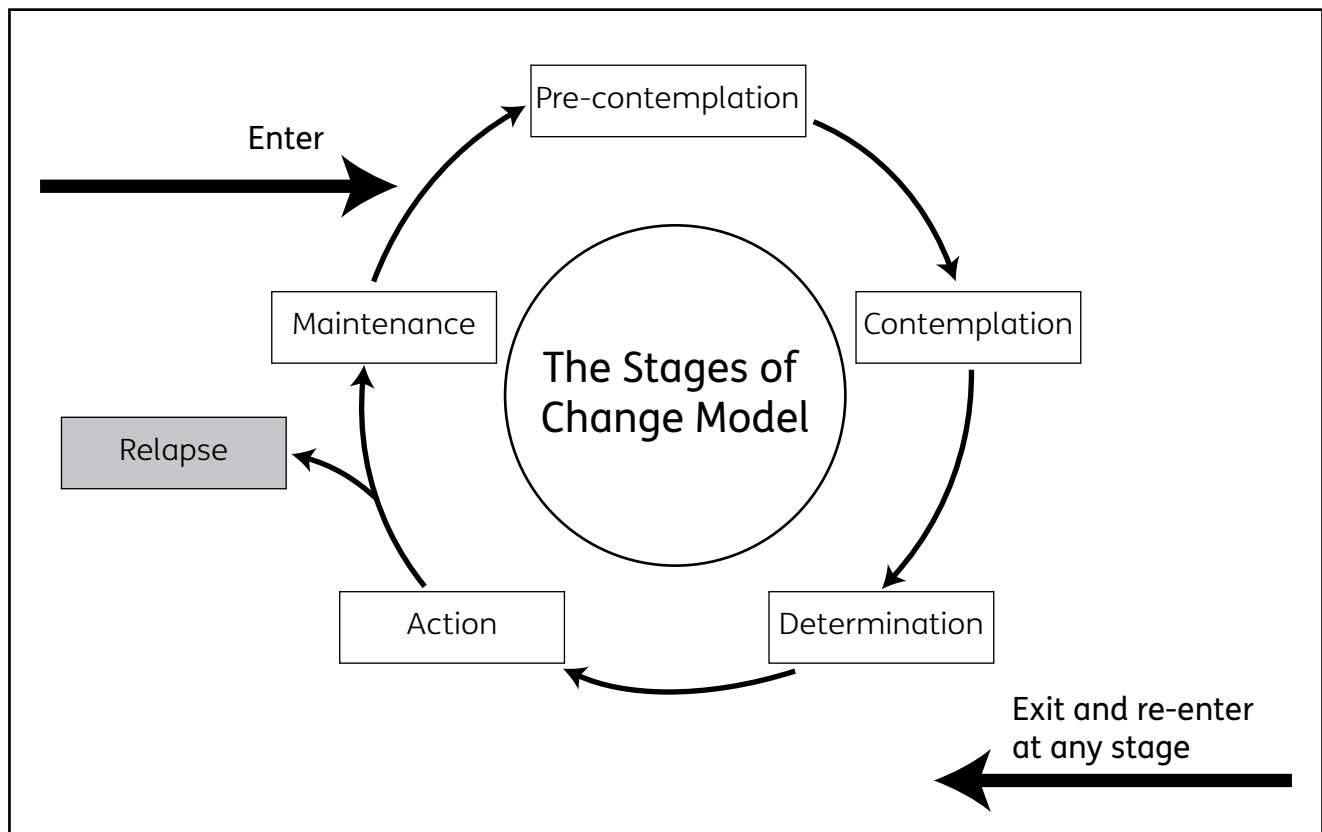
Although fundamentally linear, the model is perhaps best viewed as iterative, where people can move forwards and backwards through the cycle by relapsing and re-entering the process at different stages. However, the core premise that people will **eventually** pass along a continuum remains open to question.

The approach benefits from a high intuitive appeal and is of good fit with a traditional individual treatment perspective, which may go some way towards explaining its popularity amongst public health policy-makers and practitioners. Its appeal is no doubt enhanced by the fact that its architects offer a model that goes beyond description that focuses on the **processes of change**, i.e. they claim that it offers insights into the strategies that people employ in order to progress from one stage to the next. It is these processes that have aroused interest in health policy delivery circles.

The model is said to be based upon the synthesis of 24 influential psychotherapy models (see Table B.5). It is worth taking a moment to contemplate this evidence base, as it firmly grounds the approach within the perspective that change is a product of focusing on the individual, rather than the context in which decision-making takes place, i.e. an extension of the traditional bio-medical treatment model. Here lies a key contrast with the nudge perspective.

As with the value expectancy models, self-efficacy is central to the TTM, because it pivots on the confidence that individuals have in their ability to resist temptation and relapse into unhealthy behaviour, e.g. smokers may find it difficult to resist cigarettes when they are socialising with friends. The different processes are essentially really just ways of strengthening self-efficacy by providing **information** to demonstrate that the pros of behaviour change outweigh the cons (**decisional balance**), coupled with social support and reinforcement to help maintain the change (essentially, an individual counselling perspective).

Figure B.14 The stages of change concept⁵³



However, the TTM has been widely criticised. Several meta-analyses have questioned the effectiveness of interventions based on the TTM, while others have questioned a number of its core assumptions.

The main criticisms surround:

- limited evidence that a stages approach is superior to alternatives;
- defining coherently the boundaries of the different stages can be problematic;
- the model assumes that individuals make coherent plans, it seems that many do not;
- limited evidence that people migrate from one stage to the next.

In his defence, Prochaska has argued that much of the empirical evidence against the TTM is methodologically weak and that there is a tendency to focus on the stages of change rather than linking this to the processes of change (see also Armitage *et al.*, 2007). The TTM offers an intuitively appealing model for behaviour change, but there appears to be limited scope for translating this understanding into effective interventions.

The health action process approach

The Health Action Process Approach ((HAPA), Schwarzer, 2008) shares the core focus on self-efficacy. A claimed strength of the HAPA is its capacity to conceptualise behaviour change as either a continuum or a series of stages.

⁵³ Source: <http://johnnyholland.org/2011/01/24/the-a-b-c-of-behaviour/intent-behaviour/>

The model holds that change rests with two self-regulatory processes:

- a goal-setting (motivational) phase; and
- a goal-pursuit (volitional) phase.

Table B.5 Stages of change – process model

Process	Stage	Description
Consciousness raising	Pre-contemplation	Increasing information about the problem
Dramatic relief and emotional arousal	Pre-contemplation	Identifying and expressing emotions relevant to the problem
Environmental re-evaluation	Pre-contemplation	Assessing social and physical impacts of behaviour, e.g. through empathy
Self-re-evaluation	Contemplation	Appraising one's values with regard to the behaviour and beliefs about the self
Self-liberation	Preparation	Assessing whether others (society) are supportive of health choices
Counter-conditioning	Action	Substituting thoughts, activities, etc. that stimulated the old behaviour with ones that support the new behaviour, e.g. relaxation, positive self-statements
Helping relationships	Action/Maintenance	Using social support to maintain commitments, provide feedback and emotional support
Reinforcement management	Maintenance	Using rewards to encourage maintenance
Stimulus control	Maintenance	Avoiding stimuli that triggered previous behaviour

The latter is sub-divided into:

- pre-action (where the individual is making plans to change; and
- action (implementation/adoption).

The model typifies individuals in terms of their position on the pathway as:

- pre-intenders;
- intenders; and
- actors.

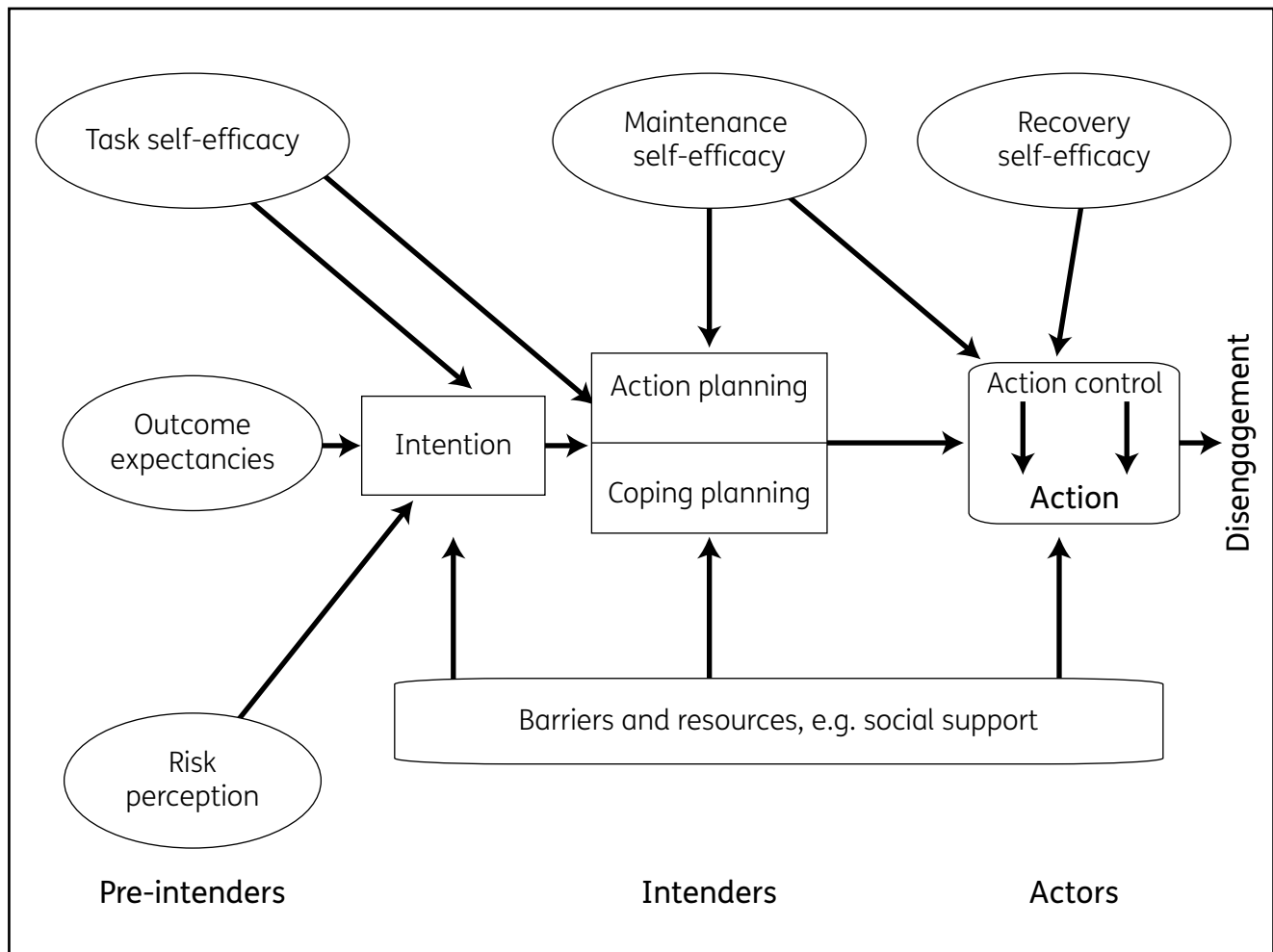
Figure B.15 illustrates the factors held to influence these different phases.

As elsewhere, intention to change is viewed as a function of task self-efficacy, outcome expectancies and risk perception or concern. Risk perception is routinely considered to be the weakest of the three, although this depends on the nature of the target behaviour.

Within the model, the relationship between intention and action is held to be mediated by planning. Planning is described as a two-part process comprising both an action plan and strategies for coping

with factors that might impede the behaviour change. Essentially it is held that planning is not an abstract set of aspirations, but concrete and detailed strategies for bringing about change. Self-efficacy is also important to planning, but the model distinguishes this as maintenance self-efficacy because it relates specifically to the perceived ability to implement plans and cope with hindrances.

Figure B.15 The health action process approach⁵⁴



Throughout the process of change, from intention, through planning, to action, there is recognition that situational barriers and resources, such as the availability of social support, are likely to impact on success. Although cognition is central to the approach, there is recognition that people's intentions, plans and efforts to change take place in an environment that can either hinder or support them.

In essence, the model proposes that behaviour change will occur when people intend to change their behaviour, have a realistic plan for doing so and have the capacity to put their plans into action, unless they encounter (external) barriers that prevent them from doing so.

B.8.3 Scope for application

Based upon what is almost certainly the most comprehensive appraisal of the evidence base (a meta-review of 87 systematic reviews) NICE has produced guidelines for policy-makers and practitioners on developing interventions based on socio-cognitive models (NICE, 2007). This

meta-analytic review examined interventions aimed at individuals, communities and nationwide initiatives.

Meta-analytic findings need to be interpreted cautiously, as they tend to focus on outcomes alone, with limited attention to differences in the degree of sophistication/prowess with which interventions were operationalised. Conclusions that can be drawn are also restricted by the scope of the constituent models and underpinning theoretical perspectives.

Jepson's 'review-of-reviews' (Jepson *et al.*, 2006) suggests that behaviour change interventions can be effective at the individual, community or population levels. Rather than describing specific interventions, we offer more generic conclusions drawn from the review which maybe more useful in terms of designing EWL/pensions investment interventions.

The Jepson review categorised interventions according to whether they attempted to change knowledge, attitudes, or behaviour. Many of the interventions included in the review drew upon themes from the different models/theoretical approaches described above, but the evidence of the effectiveness of the models was found to be slim, leading the reviewers to conclude: '*There was a lack of evidence to support conclusions regarding the efficacy of models or theories related to changing knowledge, attitudes or behaviour.*' A conclusion that might be drawn is not that theory is unimportant to intervention design, but that no individual theoretical approach appears to have a monopoly on effectiveness. Rather it seems that insights from different theoretical approaches can (should be?) be applied pragmatically in the development of interventions.

Drawing transferable conclusions from such a broad and complex evidence base is by no means straightforward, but there do appear to be tenets that are transferable to other (non-health) policy delivery domains:

- behaviour can be changed by interventions operating at the individual, community and population levels;
- success is far from assured; there is evidence of failed or ineffective behaviour change interventions and those which are effective in impacting on knowledge and/or attitudes may not result in behaviour change;
- selecting the target group can have a significant impact on effectiveness, for example, targeting individuals at key transition points in the life course can be a useful, effective strategy;
- it is not just the content or theoretical standpoint that determines the effectiveness of an intervention, but the way in which it is implemented.

B.8.4 Putting interventions into practice

The NICE guidance eschews the adoption of a particular theoretical standpoint in favour of a pragmatic approach drawing on key concepts from different theories, see Table B.6.

B.8.4.1 The utility of socio-cognitive models in the EWL and pensions domain

Although widely applied within public health contexts, real questions surround the utility of socio-cognitive models in the work and pensions context. There are important differences between the two policy domains not least with regard to the types of behaviour they seek to change and the scope for accessing target (sub-) populations.

Conceptual insights

Saving for retirement and, to a lesser degree EWL, are not decisions to be made at a fixed point in time, they are processes of behaviour change that unfold over time and need to be sustained.

Table B.6 Health model concepts for developing behaviour change interventions

Outcome expectancies	Helping people to develop accurate knowledge about the health consequences of their behaviours.
Personal relevance	Emphasising the personal salience of health behaviours.
Positive attitude	Promoting positive feelings towards outcomes of behaviour change.
Self-efficacy	Enhancing people's belief in their ability to change.
Descriptive norms	Promoting the visibility of positive health behaviours in people's reference groups.
Subjective norms	Enhancing social approval for positive health behaviours in significant others and reference groups.
Personal and moral norms	Promoting personal and moral commitments to behaviour change
Intention formation and concrete plans	Helping people to form plans and goals for changing behaviours, over time and in specific contexts.
Behavioural contracts	Asking people to share their plans and goals with others.
Relapse prevention	Helping people to develop skills to cope with difficult situations and conflicting goals.

- Demonstrating that it is financially rational to invest in pensions or EWL, is likely to have a modest influence on behaviour, and given the **universal** recognition of the need to save for retirement, i.e. failure to save is not the product of ignorance. However, there is widespread uncertainty and suspicion over how best to save.
- The complexity of options (particularly pensions) and uncertainty over outcomes (income and health, etc.) will tend to erode self-efficacy. There is scope for supportive interventions to increase self-efficacy.
- Where pension investment and/or EWL occur there is a need to provide support to sustain this behaviour, e.g. pension savings drawn down to cope with short-term financial pressures need to be restored, similarly the onset of ill-health may challenge sustained EWL.

Development and design of interventions

- Population-based mass media campaigns may be effective in communicating information about pension reform or policies relating to EWL and possibly to encourage normative shift in attitudes to EWL. However, it is unlikely that such an approach on its own will be sufficient to generate significant metrics of behaviour change.
- Where interventions can be configured that focus on structural, climate and cultural influences (barriers) to change these are likely to deliver higher metrics of impact.
- Interventions are more likely to be effective if they are segmented, targeted at specific groups and tailored to meet their specific informational needs and orientations.

- The stages of change concept can be extended, from a tool to locate individuals on the pathway, to a means of segmenting the target population(s), e.g. 50% pre-contemplative, 30% contemplative, 20% engaged, etc. That is, there may be benefit from configuring interventions to meet the need of groups at different points in the change pathway. However, it is important to bear in mind critiques of the implicit assumption that all individuals (and groups) are in transit – it is entirely possible that a significant proportion of the pre-contemplative group may never migrate to the next stage.
- Using the stages concept to segment the population offers utility via conceptualising the information and support needs of constituent sub-populations, e.g. awareness raising activity, such as case studies of fellow workers' EWL might be appropriate for pre-intenders, whereas intenders may benefit from support in EWL/retirement planning to enhance self-efficacy. Segmenting the target group in this way is potentially of utility for both direct (DWP) and indirect (intermediaries/partners) intervention, e.g. there is scope for employers to 'triage' employees in terms of their position on change pathway and configure an intervention strategy informed by this insight.
- There is evidence of gain in pension investment behaviour from aligning interventions with significant life events, e.g. birth of a child, change of job, etc. There, scope for gaining access to target groups is likely greater via the employer route.
- The time lapse between awareness raising and behaviour can influence the likelihood of change. There would be benefit from establishing the optimum time/life course point at which to deploy EWL interventions to maximise behavioural impact.
- Interventions appear to be more effective if they entail personalised support for the individual throughout the different stages of change, for example through ongoing guidance or counselling sessions. This might entail individual (or possibly group) meetings in the workplace, to assess where individuals are on the pathway to change and deliver appropriate support to facilitate change, for example, information on pensions and EWL options, generating normative change in the workforce; compiling individual action plans and offering support to maintain behaviour change and avoid relapse.

B.8.5 Conclusions

Socio-cognitive models of behaviour change have enjoyed notable popularity in public health contexts and have been applied to a lesser degree elsewhere

The principal limitations of the perspective rest with the focus on cognitive elements and underpinning assumptions over attitude-behaviour relationships combined a core focus on the individual as the unit of change. While certain models take some account of cultural and other contextual influences on behaviour, the approach remains fundamentally orientated around the individual and enhancing their self-efficacy to overcome external barriers to change, rather than focusing on more fundamental changes to contextual influences.

In many respects, the models are a product of the context in which they were conceived, i.e. public health, and the cognitive paradigm within the discipline of psychology. In essence, they constitute an extension of traditional biomedical perspectives, rooted in the **treatment** of individuals.

There is quite strong evidence that they can play a role in changing peoples' orientations to issues, in particular risks to their future well-being. However, their impact tends to be modest in the presence of strong structural and cultural counter-influences. They are predicated on the basis that change rests with the individual and finding ways to enhance **their** volition to overcome barriers to change. This can at best offer a partial **solution** in the context of work and pensions, particularly regarding

EWL, where a strong positive orientation may do little to counter shortages in post-SPA employment opportunities, part-time work, or employer policies that discriminate against older people.

There is potential utility in the use of the stages of change concept as a way of segmenting target groups, at least in so far as it may help to provide a focus for policy thinking over intervention strategy. In this respect there is potential utility in the content of both direct (DWP led) and indirect interventions, in particular via the employer. There is also scope, again particularly for employers, to use the stages concept to configure bespoke support packages for their employees.

B.9 Designing policy to nudge people to work longer and save for retirement

Key findings

- The choices people make are often sensitive to whether options are framed as gains or losses. In many instances people are loss-averse.
- If individuals are to be successfully nudged to extend their working life it is important to change the perception that they are entitled to retire at 65.
- The **endowment effect** implies that individuals will need to be offered significant compensation to give up their ‘entitlement’ to retire. Framing options as avoiding financial penalties are likely to be more effective than a focus on portraying gains.
- There is strong evidence of higher pension take-up where the default is an ‘opt-in’.
- Status quo bias – people tend to shrink from changing investment choices for fear that they may make **the wrong choice**, i.e. the avoidance of regret. They make mistakes because they are afraid to make mistakes.
- When an increase in choice increases complexity, individuals are more likely to procrastinate. One way to nudge individuals is to reduce ‘choice overload’, possibly through channelling choice.
- Setting deadlines over EWL and pensions investment options can go some way to ameliorate inertia and **status quo bias**.
- Individuals behave as if they assign money to different ‘mental accounts’. There is scope to take advantage of mental accounting when setting incentives.
- Paternalists set out to do what is ‘best’ for individuals, but the experts do not always agree on what is ‘best’. There is also the presumption that the experts are a disinterested party. Defining the ‘best’ choice that individuals should make can be problematic.
- Policy-makers may claim that they nudge individuals in a very general way, e.g. to save, diet and exercise, but effective policy nudges must be more specific than this.
- There is evidence that policy nudges may advantage different groups differently. It is important to recognise that nudge may have very little impact on those who have little autonomy and choice over their access to work and working arrangements.

B.9.1 Policy objectives

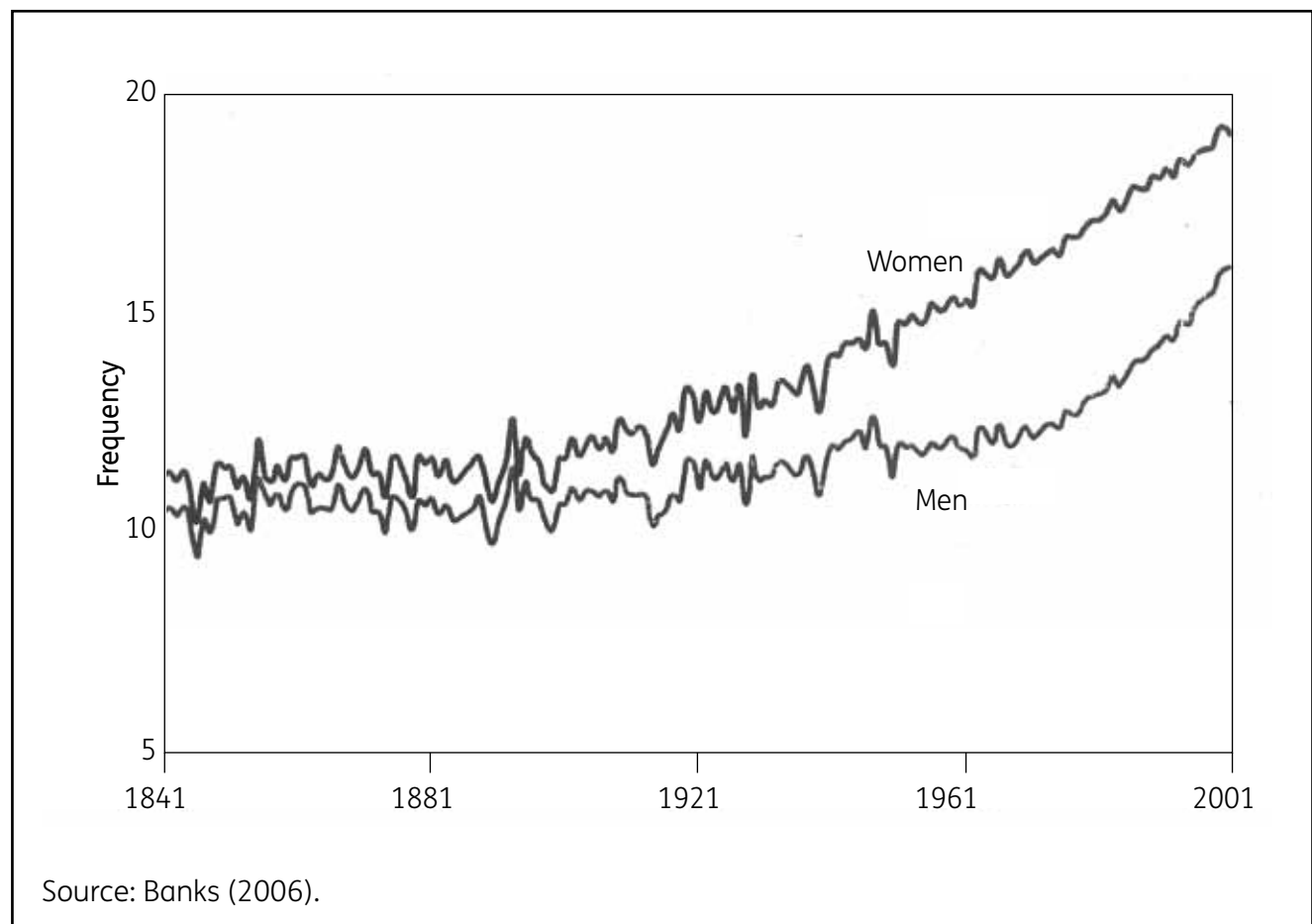
Life expectancy is increasing. Increases in longevity (and decreases in fertility) have increased the fraction of the population aged 65 and over. Figure B.16 illustrates the increase in the number of years that men and women live beyond the age of 65. In 1841, a 65-year-old man could expect to

live for another ten years. In 1961, a 65 year-old man could look forward to another 12 years. By 2001, a 65-year-old man could look forward to another 16 years.

Over a 40-year period, men have gained a 33% increase in their expected life after the age of 65. Figure B.16 also illustrates the increase that women have gained in their life expectancy after the age of 65. By 2032 there will be more than 16 million people aged over 65 in the UK and this group will account for almost a quarter of the population (ONS 2008).

One implication is that the share of a lifetime spent at work has fallen. The proportion spent at work has also fallen because the age at which individuals finish full-time education has increased. There is concern that individuals are retiring too early and that they are not making adequate provision for retirement. In 2007/08 almost a quarter (23%) of pensioners were living in households with lower than 60% of median income for the UK as a whole (compared with 15% of those at working age, Brown, 2010). The 'economic dependency' ratio is increasing (the 'economic dependency' ratio is the ratio of dependent to economically productive individuals).

Figure B.16 Life expectancy at the age of 65 (England and Wales)



The problem of increasing dependency has been exacerbated by the post-war 'baby boom'. This legacy has left the UK with a comparatively large proportion of the population currently at working age and it was able to avoid a significant increase in the dependency ratio between 1980 and 2010. But now the UK is experiencing a rise in the economic dependency ratio. The percentage of the population over 65 to those over 20-64 is likely to increase from 27% in 2000 to 47% in 2050 (Hills, 2000).

One solution is to encourage individuals to extend their working life. It is important to recognise that many considerations are relevant but the amount that an individual has saved for retirement is a very important consideration. Workers may be more willing to extend working life if they feel that they have not saved sufficiently for their retirement (e.g. Mitchell and Fields, 1984). This report focuses on the ‘behavioural anomalies’ that influence willingness to extend working lives but it also considers the impact of behavioural anomalies that influence individuals’ decision to save for retirement.

The usual (economic) rationale for government intervention in a market is that the market has failed. Barr and Diamond (2006) describe this rationale when they consider government intervention in the market for pensions. The market ‘fails’ when relative prices and regulatory constraints distort choice. In the UK steps have been taken to correct distortions (by changing price and regulatory constraints). In 1995 eligibility for disability benefits was tightened. In 2002 in-work benefits were targeted on the 50+ unemployed. In October 2006 mandatory early retirement was abolished and measures were taken to address age discrimination. These reforms have already influenced decisions (Banks and Blundell, 2005). Brown (2010) reports that, in 1994, 64% of males aged 50-64 were in employment, but by 2008 this proportion was 73%. It is also the case that, while 60% of those aged 50-59 were employed in 1994, 70% were employed in 2008.

This report focuses on a different rationale for g/Government intervention. In recent years, governments have considered policy proposals based on insights drawn from behavioural economics. These insights question the extent to which individuals are able to make rational decisions even if markets are working perfectly. The rationale for intervention is based on ‘individual failure’ (Jones and Cullis, 2000), rather than on ‘market failure’. Individuals do not behave as ‘rationally’ as **homo economicus**, individuals make ‘mistakes’.

Individuals are inconsistent. They make decisions they regret in later life. In behavioural experiments and in everyday life individuals are very sensitive to loss. Behavioural economics highlights the importance of contextual (or ‘framing’) effects. There is evidence that ‘behavioural anomalies’ are systematic and, if behavioural anomalies are systematic, it is possible to design policy to correct mistakes.

Richard Thaler and Cass Sunstein (2008) advocate ‘*libertarian paternalism*’ (and insist that this is not an oxymoron). The rationale for policy reforms is paternalistic (to stop individuals making mistakes) but reforms are libertarian (they do not force individuals to make the correct choice – they nudge individuals to make the correct choice). Key questions surround: Can individuals be nudged to extend their working life? Can individuals be nudged to make adequate provision for retirement? Later tracts of this section focus on behavioural anomalies that are relevant when designing policy to encourage individuals to extend their working lives. The objective is to consider policy measures that nudge individuals to make correct decisions.

B.9.2 The rationale for policy designed to nudge

Thaler and Sunstein distinguish between **Humans** and **Econs**. They compare the choice a **Human** makes with the choice that an instrumentally rational **Econ** would make. Behavioural anomalies are ubiquitous (Thaler, 1994) but measures can be taken to nudge individuals to make the decisions that **Econs** would make, i.e. to make the choices they would make if only they were rational and able to exercise self-control.

Policy-makers must act as **choice architects**. Just as architects are often aware that their clients do not know precisely what they want, policy-makers must be aware that individuals do not always know what they want. Policy-makers must assume ‘... *responsibility for organizing the context in*

which people make decisions.’ (2008:5). Thaler and Sunstein argue that policy should be framed to ‘... *make choosers better off, as judged by themselves ...*’ (2008: 5, italics in original). Individuals must always be free to make their own choice but choice is malleable. Policy-makers are able to frame choices to nudge individuals toward options that serve their best interests.

Thaler and Sunstein (2008) present the rationale for intervention. They argue that, as framing is inevitable (pp. 84-88), it is better to frame individuals’ choices to increase individuals’ welfare. One of Thaler and Sunstein’s favourite examples is the way that the director of a cafeteria frames choice by displaying food to customers (as customers move towards the checkout). The director is able to display items to nudge customers, but customers are always free to choose whatever they want. The way food is arranged influences choice. This ‘framing effect’ could be used to encourage customers to eat more healthily (pp.1-2). More generally, choice can be framed to nudge individuals toward the outcomes that are ‘best’ for them (pp. 4-11). When focusing on retirement, Banks (2006:3) calls for policy designed ‘... *to help people make the ‘right’ choice.*’

In the next section the objective is to consider the behavioural anomalies that influence individuals’ decisions to retire. As this choice depends on individuals’ preparation for retirement, the report also considers individuals’ decisions to save for retirement. The rationale for policy reform is that individuals make mistakes (and that they know they make ‘mistakes’). When Thaler and Sunstein (2008:116) consider the decision to save for retirement they ‘... *can say for sure that some people in our society are definitely saving too little – namely those employees who are not participating at all in their retirement pension or are saving a low percentage of their income after having reached their forties ...*’. They refer to a questionnaire survey in which ‘... 68% of participants in a defined contribution saving plan said that their saving rate was ‘too low’, 31% said that their saving rate was ‘about right’ and only 1% said that their saving rate was ‘too high’.’ (p.116).

B.9.3 The relevance of behavioural anomalies

Neoclassical economists argue that individuals attempt to maximise utility over their life cycle. When deciding how long to work and how much to save for retirement, they rely on the life cycle model, e.g. Modigliani and Brumberg (1954). Individuals attempt to stabilise consumption across each period of their lifetime because they experience diminishing utility of consumption. Individuals decide how much of their life to devote to acquiring skills (when they are young they borrow to pay for consumption and to invest in education). They decide how long to work (and while they are at work they save for their retirement). When they are at work they are net savers (repaying debt and purchasing financial assets for the future). In their old age they call on their savings (a pension fund) to stabilise consumption. Thaler (1990, 193-4) describes ‘... *the essence of the life cycle theory.*’ He argues that when you rely on the life cycle model, you ‘... *compute the present value of your wealth including current income, net assets and future income; figure out the level of annuity you could purchase with that money; then consume the amount you would receive if you in fact owned such an annuity.*’

Broadly speaking, there is evidence that is consistent with the proposition that individuals rely on a life cycle model. The young have more debt. Savings increase with age and with income. Individuals rely on financial assets when they retire. But **Humans** are not able to make decisions as well as **Econs**. The evidence is that ‘... *households do not smooth consumption much over the life cycle ...*’ (Lusardi, 1999:83). The evidence is that consumption drops sharply when individuals retire (Banks et al., 1998).

Humans make mistakes (Thaler 1994) but if policy focuses on the following anomalies it is possible to design policy to correct mistakes:

B.9.3.1 Loss aversion

Individuals attach far greater weight to a potential loss than they attach to a potential gain, e.g. see Kahneman and Tversky 1984. They are risk averse when they focus on gains (preferring the certainty of £50 to a 50% chance of £100). But they are risk seeking when they focus on losses (preferring a 50% chance of losing \$100 to the certainty of a loss of £50). This means that choice is sensitive to the way options are framed (Tversky and Kahneman, 1981). De Martino *et al.* (2006) describe an experiment in which individuals (with \$50) were offered the choice of keeping \$20 or taking a gamble with a one-third chance of keeping all \$50 and a two-third chance of keeping nothing. Most chose to keep the \$20. However, when the same choice was framed as losing \$30 or taking a gamble with a one-third chance of keeping all \$50 and a two-third chance of losing it all, individuals usually took the gamble.

How relevant is loss aversion? Consider the impact of loss aversion on the mistakes that individuals are likely to make:

Loss aversion and cognitive dissonance

Loss aversion might be so extreme that individuals prefer to persuade themselves that they will never experience a loss. If individuals were to optimise over their life cycle they would be forced to contemplate their mortality. If they were to focus on the final stage of their life, they would have to confront their mortality. In practice the evidence is that they behave as if they will always be of working age (always able to work). Parker and Clarke (1997, 1998) identify cognitive dissonance when they analyse questionnaire responses. They refer to ‘... *the difficulty that younger people have in imagining that they will get old.*’ (Parker and Clarke, 1997, p.129). Individuals tend to postpone choices. They are ill-prepared for the future. By the time they focus on retirement, they are at the age at which private insurance schemes are no longer viable.⁵⁵ Parker and Clarke (1997, p.131) refer to respondents’ ‘... *regret at not feeling adequately protected for forthcoming old age ...*’.

Merrill (1992) also reports evidence of cognitive dissonance in the USA. Individuals are reluctant to buy insurance ‘... *because they either view such future benefits as theoretical or simply deny the ageing process ...*’ (p.179). Weber (2003) argues that individuals avoid retirement-related decisions because this inherently involves contemplating unpleasant future events (including the negative implications of ageing and death).

The first implication is that, if individuals are to be nudged, they are more likely to be responsive if they are asked to focus on earlier stages of their life cycle. If they are offered financial advantages to extend their working life (e.g. tax relief, or government schemes to match saving), they are more likely to respond if the benefits of schemes appear relevant at earlier life stages.

A second implication is that policy must treat individuals close to retirement as ‘younger’ members of society. The Turner Report (Pensions Commission, 2005) was critical that government training schemes had been skewed away from older people. The report recommended that public training schemes should not be age-specific. The policy signal must be that it is always worth investing in training (because there has been an increase in longevity).

Loss aversion and endowment effects

One implication of loss aversion is that individuals value the commodities they possess far more than ‘financially equivalent’ commodities they do not possess (Thaler, 1980). The sum of money they are ‘willing to accept’ to relinquish a commodity (or an entitlement) is much greater than the sum

⁵⁵ Lusardi (1999:82) reports that contrary to the assumption of the life cycle model ‘... *as many as one third of people aged 51-61 have not begun to think about retirement ...*’.

they are ‘willing to pay’ to acquire financially-equivalent commodities (or entitlements). This is the **endowment effect**.

The evidence is that individuals feel that they are entitled to retire (Tausch *et al.*, 2010). Workers have protested in street riots in some European countries when governments have increased their age of retirement, e.g. *Economist* (2010b). If individuals are to be nudged to extend their working life it is important to change the perception that they are entitled to retire at 65.

At present, in the UK the importance of the entitlement to retire is magnified because ‘... *for the great majority of people, retirement is not a gradual process of labour-market withdrawal, but instead involves a fairly abrupt transition from full-time employment to zero hours.*’ (Banks and Smith, 2006:46). However, policy can be designed to change this perception. Policy can be designed to alter the perception that retirement is **indivisible** and **irreversible** if policy facilitates the possibility of part-time employment after retirement. Individuals are likely to relinquish their perceived entitlement if the magnitude of what is involved is reduced, e.g. by encouraging work for part of the years that follow retirement and receipt of a pension.

The **endowment effect** also implies that individuals must be offered significant compensation to relinquish their ‘entitlement’ to retire. The Turner Report (Pensions Commission, 2005) recommended that the government should reduce (or eliminate) employers’ National Insurance contributions for workers over the age of 65. Financial inducements may need to be substantial (given the difference between the amount that individuals are ‘willing to pay’ for entitlements and the amount they are ‘willing to accept’ to relinquish an entitlement).

Loss aversion and framing

If individuals are to be nudged to work longer by offering financial incentives, how are financial incentives to be offered? The literature on loss aversion reports far greater sensitivity to ‘penalties’ than to ‘gains’. If policy is to nudge individuals to extend their working lives, inducements must be framed as avoiding financial penalties (rather than securing equivalent financial gains).

Fethersonhaugh and Ross (1999) tested the relevance of framing in the USA. Here, the default retirement age was 65 but workers were permitted to claim reduced social security benefits if they retired before 65 (and nearly two-thirds chose to do this). The alternative was to work beyond 65 to gain further financial benefits, i.e. increased social security and increased private pensions. Fethersonhaugh and Ross (1999) offered respondents two questionnaire options. These were described as:

Option I

Under the current social security system the **average** male American worker who is choosing to retire either at age 65 or 68 would have the following two choices:

A. He could retire at age 65 and begin receiving a social security pension of \$10,000 a year.

or

B. He could retire **later**, at age 68 instead of 65, and begin receiving a social security pension of \$12,500 a year, which is equal to \$10,000 a year **plus a credit** of £2,500 a year for delaying retirement.

Given the two options above which would **you** prefer?

In this question, respondents are offered a **gain** if they extend their working life, but in the second question they are offered the opportunity to avoid a **penalty** by extending their working life.

Option II

Under the **current** social security system the **average** male American worker who is choosing to retire either at age 65 or 68 would have the following two choices:

A. He could retire at age 68 and begin receiving a social security pension of \$12,500 a year.

or

B. He could retire **earlier** at age 65 instead of 68, and begin receiving a social security pension of \$10,000 a year, which is equal to \$12,500 a year **minus a penalty** of £2,500 a year for retiring early.

Given the two options above, which would **you** prefer?

The authors reported that when ‘... *a reward is offered for retiring later, only 38% of respondents chose the later of the two retirement ages, that is age 68. When a penalty is imposed for retiring earlier, fully 57% chose that ...*’ (p.198). They also reported that, for respondents older than 47 years, 37% preferred to retire at 68 when this option was described as a gain but 63% preferred to retire at 68 when the options were described ‘*in terms of a prospective loss for early retirement*’ (p.198).

When the perception is that there is a penalty if individuals do not continue to work (rather than a reward if they continue work) there is greater willingness to continue working. Individuals who feel that they might lose out by retiring earlier are more likely to continue working (even if there is no real loss in financial terms).

In 1983 the US Congress voted to increase the age at which unreduced pension benefits were paid from 65 to 67. The change was to be implemented gradually from 2001 to 2022. Workers who claimed benefits between the age of 65 and 67 would face **reductions** in monthly benefits relative to the (new) age 67 reference point. Fethersonhaugh and Ross (1999: 206) note that the manner in which this policy is presented is important because ‘... *matters of framing are likely to exert a significant impact on the retirement decisions ...*’.

A second conclusion related to the form that financial rewards should take (if a financial inducement is offered to continue to work). Fethersonhaugh and Ross focused on two alternatives. First, respondents were offered a social security pension of \$10,500 (available if they retired at 65) and a credit of \$2,500 per annum if they deferred retirement to 68. In the second scenario they were offered the pension of \$10,000 (available if they retired at 65) and a ‘one time bonus’ of \$25,000 if they continued to work until 68.

The \$25,000 payable at 68, together with the annuity of \$10,000 a year had a present value (discounted at a 2.8% real interest rate to age 80) of \$125,740. The annuity of \$12,500 a year at age 68 had a higher present discounted value of \$125,925. Fethersonhaugh and Ross reported that: *‘Nevertheless 76% of our survey participants chose the \$25,000 bonus and \$10,000 annuity, while only 24% chose the \$12,500 annuity.’* (p.203).

Fethersonhaugh and Ross (1999:207) concluded that *‘... payment of a lump sum for deferring retirement has considerable attraction provided that public policy aims to encourage later retirement ...’*. Of course, they also noted that (with moral hazard) a lump sum might attract workers who believe they will enjoy a shorter life. They also noted that *‘... the lump sum would most likely increase the chance that retirees who may supplement their pension with part-time work will find themselves with inadequate income at some future date ...’* (p.207).

Loss aversion and the default rule

One implication of ‘loss aversion’ is that individuals procrastinate. With inertia, individuals make mistakes (by postponing decision-making). In these circumstances the selection of a default rule is important.

To begin, consider individuals’ decision to save for a pension. Thaler and Sunstein (2008) highlight individuals’ failure to make ‘good use’ of tax relief. They state that, surely, individuals are *‘foolish beyond doubt?’* (pp.103–7). If individuals procrastinate they can be nudged by changing the default rule. When considering pension plans, Thaler and Sunstein recommend a default rule that automatically enrolls new employees into a saving plan (while allowing individuals to opt out if they prefer).

How important is the default rule? Changing the default rule increases **participation** rates. Madrian and Shea (2001) analyse a case study. When the default required new employees to opt-in, barely 20% had joined after three months of employment (and, over three years, the participation rate only gradually increased to 65%). When the default was that new employees were automatically enrolled (but able to opt-out), enrolment of new employees rose to 90% immediately (and this increased over the following three years).

Orszag (2008) refers to a study in which only 45% of newly hired workers participated in a 401(k) plan in the USA when they were required to opt in, but rose to 86.5% when enrolment was automatic. This was particularly important for low paid employees (less than \$30,000p.a), participation rates rising from 25% to 77% following the introduction of automatic enrollment.

The question is whether this is sufficient. Critics argue that changing the default rule to automatic enrolment may not necessarily increase total planned savings (Choi *et al.*, 2001b). The evidence is that, after automatic enrolment, individuals who might have voluntarily enrolled at higher contribution rates (or chosen a more aggressive investment) stay with the low saving rate and conservative investment options set by their employer. In Madrian and Shea’s (2001) analysis of automatic enrolment, most participants remained at the default savings and the conservative investment choices set for them by their employer.

The case for automatic enrolment has been accepted in the UK. The Turner Report (Pensions Commission, 2005), in which people who do not belong to a workplace pension scheme would automatically be enrolled into the NPSS. Employers would be compelled to contribute to their workers’ NPSS. Under the NPSS, employees would contribute 4% of their salary, employers 3% and the Government 1%. But people would remain free to opt out of the NPSS.

The Pensions Act of 2008 introduced a number of measures to ensure that, from 2012, all eligible workers who were not already in a good quality workplace would automatically be enrolled into a

qualifying pension scheme. Employers would have a duty to automatically enroll eligible workers between the ages of 22 and SPA into a qualifying workplace pension scheme. Automatic enrolment means that, instead of choosing whether to join a workplace pension scheme, all eligible workers will have to actively decide not to join (if, for any reason, they feel this is not a suitable scheme).

When focusing on the decision to retire, the same behavioural anomaly is important. A mandatory retirement age is a default rule. The removal of the UK mandatory retirement age in April 2011 means that individuals will feel that they must now choose to opt out of the labour force to retire.

Loss aversion and portfolio management

Loss aversion is also relevant when individuals have discretion to manage their pension fund. Neoclassical economists assume that individuals manage their finances to maximise expected utility. They anticipate that individuals will trade off the increased risk associated with some of their investments for the increased income that these assets offer. However, studies in behavioural finance call in to question individuals' ability to make these decisions.

Behavioural studies report evidence of a **disposition bias**. While share traders are prepared to hold on to poorly performing stocks to avoid realising a loss they are ready to sell rising stocks to realise a gain (Scheffrin and Statman, 1985; Shapira and Venezia, 2001). While individuals are likely to take more responsibility for managing their financial portfolios in direct contribution pension schemes, there is evidence of a bias in favour of the **status quo**. In 2005 'super choice' allowed workers in Australia the opportunity to switch their retirement funds between investment managers. The expectation was that many would take this option but the reality was that few took advantage of the option (Fear and Pace, 2008).

Samuelson and Zeckhauser (1988) consider the status quo bias. Individuals behave as if they are afraid of incurring a loss (in a new fund relative to the previous one) and this weighs more heavily than the potential for gains (even when gains are considered more likely). Individuals appear reluctant to make decisions if they feel they do not have full information, even when the information they lack is not actually relevant to the decision (Shafir *et al.*, 1993). Benartzi and Thaler (2007) argue that individuals fail to rebalance their pension portfolios (that there is inertia in asset allocation) because they fear the regret they might experience (if they reallocate their portfolio and observe that their new investments do not perform as well as their original investments). They make mistakes because they are afraid to make mistakes.

O'Donoghue and Rabin (1999) explain the existence of a **status quo bias** with reference to systematic mistakes that are made when contemplating change. They argue that, when individuals consider moving a sum of money from a low interest account to a high interest account, they believe that the costs of making the transactions **on any day** are high while the benefits of not moving the funds **for that day** are low (because over just one day differences in returns will be negligible). They repeat this assessment every day and this explains why they retain the **status quo**.

One way to correct these 'mistakes' is to introduce strict deadlines. O'Donoghue and Rabin (1999) focus on this strategy when analysing individuals' reluctance to make financial decisions. They argue that governments must reduce the number of transaction dates, e.g. if governments offer tax relief for certain forms of saving, they should impose deadlines beyond which such tax relief will no longer be available.

The same strategy might be applied when nudging individuals to extend their working lives. If individuals are offered financial incentives (as described above), it might be worth setting a

‘transaction time’, e.g. age 60, at which individuals must commit to extend their working life if they are to receive financial incentives. The proposition is that deadlines correct inertia and **status quo bias**.

B.9.3.2 Hyperbolic discounting: the absence of self-control

Economists argue that ‘rational’ individuals will discount future costs and benefits because they occur in the future and that they will discount future costs and benefits at a constant rate over time. Behavioural studies indicate that individuals discount future costs and benefits at a much higher rate in the short run than in the long run. For example, an individual might prefer to receive £100 now over £200 next year and (at the same time) the individual might prefer £200 in three years’ time over £100 in two years.

Behavioural studies suggest that individuals rely on hyperbolic discounting (Ainslie, 1975). This implies that individuals are likely to consume more in the short-term than they believe to be in their long-term interests. They behave as if they have time-inconsistent preferences. Ainslie and Haslam (1992) report the results of an experiment in which a majority of subjects said that they would prefer to have a prize of a \$100 certified check available immediately, as compared with a \$200 certified check that could not be cashed for two years. The same people did not prefer a \$100 certified check that could be cashed in six years to a \$200 certified check that could be cashed in 8 years. While they preferred to wait for the larger amount in eight years, some time later (within the next six years) their preference switched to preferring to receive the smaller amount sooner.

The preference for consumption in the short run (and the change in preference as time proceeds) means that individuals behave as if they lack self-control. When focussing on pensions, Choi *et al.* (2001a) illustrate the difference between ‘desire’ and ‘action’. After a financial seminar, all workers who were not participating in a firm’s 401(k) plan immediately indicated that they would join the plan. However, over the next six months only 14% did so.

The implication is that, even if individuals recognise that they should save, they are likely to put off the sacrifice that is required. One policy option is to encourage individuals to make commitments to save (and to increase their saving in the future) and to rely on individuals’ inertia to ensure that they will correct the mistakes that are attributed to hyperbolic discounting.

Thaler and Sunstein (2008) report the results experienced when the *Save More Tomorrow* pension plan was introduced. In the *Save More Tomorrow* plan individuals were invited to commit themselves in advance. They were invited to increase their saving contribution as time went on, and to increase their saving as their pay increased. The plan was first implemented in 1998. About 90% of employees met with a financial consultant. The consultant suggested that they increase their savings by five percentage points of their pay and about 25% agreed. The rest were offered the *Save More Tomorrow* programme. They were offered a plan that would increase their saving by 3 percentage points every time they received a pay rise. Seventy-eight per cent of this group agreed.

When comparing the savings of these groups, the group that chose not to meet the consultant saved about 6% of income at the beginning of the programme and that percentage did not change over the next three years. The second group (who accepted the advice to increase their savings rates by five percentage points), increased their savings from just over 4% to just over 9% (and this rate remained constant over the next few years). The third group (that joined the *Save More Tomorrow* plan) started with the lowest saving rate of the three groups (around 3.5% of income). However, with this programme, their savings increased. Three and a half years (and four pay raises) later their savings rate had almost quadrupled to 13.6%. This was much higher than the 9% savings rate for those who had accepted the consultant’s initial recommendation to increase savings by five percentage points.

The same analysis also suggests that if individuals are to be nudged to work longer they must be encouraged to **commit** to contractual arrangements in their late middle-age (contractual agreements that require them to extend their working life).

B.9.3.3 Mental accounting

Neoclassical economists assume that money is **fungible**, (i.e. that one pound is interchangeable with another). Behavioural economists question this assumption. Individuals behave as if they assign money to different ‘mental accounts’, e.g. to pay for housing, for groceries and for leisure. This explains why individuals appear to make inconsistent financial decisions. They may take great care to save a few pounds on grocery expenditures (or on transport expenditures) but appear profligate when they spend from other accounts, e.g. when they spend money on their holidays (see Thaler, 1999 and Cheema and Soman, 2006).

Mental accounts are important when considering the choices individuals might make to optimise over a life cycle model. Individuals’ willingness to save for the future depends on the way they assign income to different mental accounts. Sheffrin and Thaler (1988) describe a behavioural life cycle model. In this model individuals appear to be aware that they must exercise self-control (to smooth their consumption stream) but appear to behave as if they have a preference for immediate gratification. Sheffrin and Thaler refer to an internal conflict between two mutually inconsistent personalities. The first of these is the ‘planner’ (concerned with the long run). The second is the ‘doer’ (concerned with the short run). Will power is important but will power is exercised by relying on ‘rules of thumb’ and mental accounts. Individuals are tempted to spend if income is assigned to particular mental accounts.

Individuals’ propensity to consume from income depends on the way they assign income to mental accounts. If windfall income is mentally assigned to a wealth account an individual’s propensity to consume windfall income is lower than if it is assigned to a present income account. Sheffrin and Thaler (1988) argue that a lump sum bonus is treated quite differently to an increase in regular income.

The amount individuals save for the future depends on the way they allocate increments in wealth. The way that accounts (and saving accounts) are labelled is important. Sheffrin and Thaler (1988) report the results of the following experiment. Participants were offered: (i) an increase in regular payments (\$2,000 in 12 months); (ii) a lump sum payment (\$24,000) and (iii) a future payment (\$2,400 plus interest in five years). The total payment was identical but subjects consumed more if they received the regular payments than if they received the lump sum payment. The explanation is that individuals assigned these payments to different mental accounts and individuals have different propensities to consume from different mental accounts. Levin (1998) considered this analysis when analysing responses from a ‘retirement history’ survey.

Policy that favours specific mental accounts can be used to encourage self-control and to increase savings. If governments rely on financial incentives, a lump sum payment may increase savings more than benefits received as a higher regular wage payment. In the behavioural life cycle model individuals rely on mental accounts to lock themselves into specific savings schemes.

8.3.4 Herding

Individuals appear to be influenced by the choices that others make. Thaler and Sunstein (2008) refer to individuals’ tendency to follow the behaviour of others. They argue that: ‘*The general lesson is clear if choice architects want to shift behaviour and to so do with a nudge, they might simply inform people about what other people are doing.*’ (p.65).

There is evidence of ‘herding bias’. Orszag (2008) focused on workers’ decisions to retire before 65 in the USA. While social security payments were lower when individuals retired before 65, the financial adjustment was actuarially ‘fair’. On average, the typical person who retired received roughly the same amount of benefits (in net present value terms) regardless of when benefits were first claimed. There was nothing ‘special’ about the full benefit age that explained why a disproportionate number of people chose to first claim benefits at this age (rather than at, say, 63 or 68). Orszag (2008:3) argued that there was nothing to explain why ‘... *a substantial number wait to receive benefits until they reach the age at which they qualify for full benefits.*’

Aaron (1999) attempted to model the sensitivity of choice to the choices made by others. He focused on a payoff matrix in which individuals’ payoffs also depend on a ‘gloat factor’ (this is the payoff that a retired worker experiences when others work). He demonstrated that there were particular constellations of payoffs that would explain why a ‘... *nearly everybody-works-equilibrium may be fragile, or may cease to be an equilibrium even if welfare with continued work by all averaged over the group would be higher than it is with all retired ...*’ (p.62).

If there is a herding bias (or, more generally, collective response) the question is what informs this collective response. The SPA may be the age at which individuals anticipate that others in the ‘herd’ will retire. In the UK the SPA has been 65 and the average retirement age is close to 65 (63 for men and 61 for women, Brown, 2010).

The impact of changing a mandatory retirement age and implications for changing an SPA might be analysed by considering the impact of changes in other countries. The USA prohibited a mandatory age of 70 for retirement in 1978, and in 1986 abolished the mandatory age all together. Some states chose to raise, or abolish, mandatory retirement ages ahead of the federal government and empirical studies have commented on the implications, e.g. Neumark and Stock (1999) concluded that abolition raised employment rates among affected older workers by seven percentage points.

It is difficult to rely entirely on US experience to estimate the impact of abolishing mandatory retirement in the UK because ‘... *employment rates of older workers are typically lower than ... in the USA when mandatory employment was abolished ...*’ and ‘... *few people appear to be genuinely constrained by mandatory early retirement ...*’ (Banks, 2006: 50). Some argue that a mandatory retirement age provides positive advantages. It has been argued that one benefit is greater flexibility when negotiating long-term work contracts. Lazear (1979) argued that long-term contracts between employers and employees allow employers to pay employees more than their marginal product in their later years. Yet, while it has been argued that individuals’ marginal product falls markedly at the age of 65, this is questionable. Meadows (2003) surveyed studies that question the argument that workers’ marginal products fall much lower than their wage. The positive effect of experience offsets any loss of speed, or loss of strength. Banks (2006: 51) argues that there is ‘... *little reason not to abolish early mandatory retirement*’.

In the UK, the Turner Report (Pensions Commission, 2005) recommended that the SPA for men and women should rise to age 66 by 2030, to age 67 by 2040 and to age 68 by 2050. It also recommended that the Government should take measures to publicise the already existing option for people to defer taking their State Pension. The Labour Government decided to increase the SPA to 68 by 2046 (*Economist*, 2010a).

B.9.4 Heuristics: relying on ‘rules of thumb’

Decisions can be very complex (Garey and Johnson, 1979).⁵⁶ Individuals may feel unequal to the task. Instead, they may prefer to rely on heuristics (‘rules of thumb’) to deal with complexity. Simon (1965, 1966) referred to ‘bounded rationality’. The question is whether it is possible to rely on evidence of rules of thumb to nudge individuals to increase their retirement age and to increase their savings for retirement?

When considering the age to retire, it is easier to rely on a rule of thumb, e.g. that 65 years of age is the age to retire. If there is a recognised SPA this may serve as a rule of thumb. The signal is that this is the best age to retire. One way to nudge individuals (to work beyond the age of 65) is to increase the SPA. An increase in the SPA is a signal that the best option is to work beyond the age of 65 years. The default retirement age was abolished in 2011. When it was abolished individuals may still have attached significance to the age at which they received their State Pension. The Labour Government decided to increase the State Pension age to 68 by 2046 (*Economist*, 2010a). The Chancellor of the Exchequer, George Osborne, has announced that it will rise to 66 by 2020.⁵⁷

B.9.4.1 Effects of complexity on retirement decision-making

Pensions and related financial products are becoming more and more complicated. As individuals move to DC private pension plans they are required to make more choices (as compared to the experience they would have had with a DB private pension plan). With a DC plan, individuals may have to decide which assets to hold in their pension portfolio, as well as when to annuitise their fund and what kind of annuity to take out. Of course, their task is made even more complex when they try to optimise overall sources of income, because they must also anticipate changes in social security and public health provision (Mitchell and Fields, 1984).

No wonder individuals rely on rules of thumb. Benartzi and Thaler (2001) argue that individuals rely on a 1/nth strategy (and other naive diversification strategies) when deciding how to divide assets in different funds. Are they really equipped when they are asked to make financial decisions? Surveys indicate that fewer than one-fifth of investors in stocks, bonds, funds or other securities can be described as financially literate (Alexander *et al.*, 1998) and similar assessments have been made when assessing individuals’ understanding of their pension plans (Schultz, 1995). Gustmann *et al.* (2009) note individuals’ confusion in the USA as to whether their pension plans were DB or DC.

Differences in financial acumen become evident at an early age and have long-lasting effects. Empirical studies argue that different levels of financial literacy explain patterns of savings, portfolio choice and wealth accumulation (Lusardi, 2008). Banks and Oldfield (2007) argue that financial acumen is lowest when individuals’ numeracy is low. They are also concerned that individuals make more mistakes as their cognitive skills decline, e.g. after the age of 50. The evidence is that older beneficiaries are more likely to be unaware of the kind of pensions they hold and of the mix of stocks and bonds they hold. Some studies suggest that individuals are even less aware when governments assume greater responsibility. Jappelli (2010) considers panel data for 55 countries between 1995 and 2008 to show that inhabitants of countries with generous public pensions (and lower need for private savings) have lower levels of financial literacy (other things being equal).

⁵⁶ Some argue that it is ‘rational’ to rely on heuristics to reduce transactions costs (e.g. Gigerenzer and Goldstein, 1996; Goldstein and Gigerenzer, 2002).

⁵⁷ <http://www.bbc.co.uk/news/uk-politics-12674194?print=true>

Can measures be taken to develop basic skills and prevent cognitive decline? Thaler and Sunstein (2008:112) are far from optimistic that training can reduce mistakes. They report the results of a case study in which an employer offered training and then tested its impact. It was the case that ‘... before the education, the average score of employees was 54; after the education, the average score crept up to 55.’ (p. 112). They conclude that ‘teaching is hard!’ (p.112). They also question the commitment that individuals are likely to make to training schemes for (as already noted): ‘One study found that at the seminar everyone expressed an interest in saving more, but only 14% actually joined the savings plan. This was an improvement, but not a large one, over the 7% of comparable employees who did not attend a seminar and joined the saving plan.’ (p.112)

In the UK the pension system is poorly understood; ‘... in 2000 only 53% of the population reported at least a ‘reasonable, basic’ knowledge of pensions, but by 2005 this has fallen to 47% ...’ (quoted in Hills, 2006:123). In a survey reported by Clery *et al.* (2007) only 5% claimed to have a good knowledge of pensions and a quarter claimed to know little or nothing about pensions. Individuals also have very little understanding of how **their** decisions might affect their position because they cannot forecast the Government’s position. Government changes to means-testing make it difficult for many individuals to have confidence in how their own decisions are likely to affect their retirement income (Hills, 2006).

In March 2011 the Government indicated that there would be a move towards a flat-rate State Pension and the removal of top-up payments for lower earners who do not save. The speculation is that the basic rate of pension will be £140 a week. These reforms will reduce the complexity of the decision to save for the future. It will also simplify the decision to save by removing the disincentive that is created by means-testing for top-up payments.

B.9.5 Nudges that channel choice

Neoclassical economists argue that an increase in choice will increase welfare. Behavioural economists have reservations. When an increase in choice increases complexity, individuals are more likely to procrastinate (Tversky and Shafir, 1992; Shafir *et al.*, 1993). They are more likely to keep doing what they are currently doing (Heiner, 1983). One explanation is that they are concerned that they might overlook the ‘best’ option.

In one experiment subjects were presented with a display of either six or 24 fruit jams inside a food shop. While subjects were more likely to approach the display with 24 jams, they were less likely to make a purchase. In a different experiment in which participants selected a chocolate from either six or 30 options, subjects with a more limited choice were more satisfied with their decision than those who faced more extensive choice. In a third experiment, students were more likely to complete a voluntary assignment if they were offered a choice of six possible topics than if they were offered a choice of 30 (and those with more extensive choice also wrote poorer essays). Iyengar and Lepper (2000) demonstrate that people are less likely to come to a decision if there is a large variety of choice. In the Swiss health insurance market individuals were less likely to change funds and more likely to retain the status quo the greater the choice of funds (Frank and Lamiraud, 2009).

Studies suggest that enrolment in US pension plans is higher if employees are given fewer options (Sethi-Iyengar *et al.*, 2004). Iyengar *et al.* (2003) found that participation rates in United States 401(k) pension plans peaked at 75% when individuals had only two options (this ratio fell to 60% when the number of options approached 60). Bertrand *et al.* (2006) considered responses in South Africa to letters that offered large, short-term loans at random interest rates. Letters offered either one, or four, examples of loan sizes and terms (along with the respective monthly repayments). More people took up the offer when they received the single-option letter (rather than the four-option letter) and the difference in take-up was equivalent to reducing the interest rate by 2%.

This literature suggests that one way to nudge individuals is to reduce ‘choice overload’. Thaler and Sunstein (2008:130) considered nudging savers by offering a **limited** number of portfolios (designed by experts). Plans might be designed to match specific planned retirement dates and particular lifestyles. Plans can be conservative, or aggressive, as far as risk is concerned. Plans can be presented as alternative defaults (from which savers can opt out if they prefer different portfolios).

Beshears *et al.* (2006) analyse responses to a plan called *Quick Enrolment*. The plan offered new employees a choice between the status quo and a predetermined option of 3% of pre-tax salary invested in a mutual fund. New employees were able to tick the appropriate box next to their preferred option. If they wanted more control of their investment they could still access other options. While participation rates were higher when individuals were offered the *Quick Enrolment* plan, there was evidence of procrastination when these responses were compared with responses that were made to a more simple default enrolment strategy. The *Quick Enrolment* programme appeared a helpful guide for asset allocation decisions. However, individuals under-diversified (when they held stocks and bonds) and their asset allocations were static over time. Employers helped employees by offering asset allocation bundles categorised by risk preference. For example, a 401(k) plan could be designed to enable an employee to invest in: (i) a bond fund; (ii) an equity plan; and (iii) an international equity fund. Plans might offer investments labelled ‘conservative’ or investments labelled ‘aggressive growth’. In this way portfolio bundles could be offered to individuals in an easy way.

When focusing on the decision to extend a working life the value of channelling choice is also relevant. If individuals are able to continue in their familiar place of work (in one, or two, full-time or part-time roles) the number of choices is constrained and the likelihood that individuals will extend their working lives might increase. On the other hand, if there are a plethora of different (new) options individuals may not investigate any of them (and simply retire).

While policy can be designed to nudge, a number of questions should be addressed before setting out to nudge.

B.9.5.1 How possible is it to determine the ‘best choice’?

Paternalists set out to do what is ‘best’ for individuals, but they do not always agree on what is best. Thaler and Sunstein are clear that the best choice is the choice individuals would make if they: (i) had perfect information; (ii) were able to assess information rationally; and (iii) were able to practice complete self-control. The problem is that, because there are behavioural anomalies, this choice is not observable.

Thaler and Sunstein (2008) describe the conditions in which policy should ‘nudge’ individuals. They argue that nudge is required when: (i) decisions are difficult; (ii) decisions are infrequent; (iii) feedback to individuals is poor; (iv) policy-makers have greater expertise than individuals; and (v) differences in ‘*tastes and needs*’ between individuals are small and ‘*easily... detected*’ (pp.72-6). However, this is a long way from specifying the best choice that individuals should make.

Thaler and Sunstein are confident that individuals make mistakes because individuals say that they make mistakes. Focusing on the low rate of saving in the USA, Thaler and Sunstein (2008:103-7) say that: ‘... it seems clear that the costs of saving too little are greater than the costs of saving too much’ (pp 103-7). In questionnaires individuals state that they have made mistakes. However questionnaire responses are difficult to interpret. Questionnaire responses can be unreliable. Respondents may furnish the answers they think they are expected to provide. Their responses may be statements of what they believe to be the ‘right’ response (rather than statements that describe their preferences). There are also reasons to doubt responses because there are behavioural anomalies. If there is hyperbolic discounting (and an absence of self-control) these responses may be as reliable as the statements individuals make when they declare ‘... new year resolutions.’ (Sugden, 2008).

If policy is to be premised on individuals' recognition that they have made mistakes, how significant are these mistakes? Stutzer and Frey (2006) refer to many mistakes that do not require correction. They argue that people who watch a lot of television often regret the time they waste. They argue that individuals who commute long distances to work in order to live in better houses further out of town often underestimate the burden of the commute. However, these are not a '*... cause for immediate government intervention.*' (Stutzer and Frey, 2006: 21). When focusing on the adequacy of income in retirement, Loewenstein *et al.* (1999:243) question the argument that provision for retirement is as important as has been suggested. They estimate the determinants of happiness in retirement and conclude that '*... the furore over the adequacy of retirement savings might possibly be exaggerated ...*'. Analysing the responses in their sample, they indicate that the retired were less likely than the not-yet-retired to agree with the statement: '*I should have calculated how much money I would need to save in order to have an adequate retirement income.*' (p.243).⁵⁸

While it is possible to describe the conditions in which nudge might be required, it is difficult to know the extent to which individuals should be nudged. This difficulty explains why Thaler and Sunstein often abandon the objective of designing policy to increase welfare in terms of individuals' own perception of welfare. Instead, they define the 'best' choice as the choice that individuals would make if individuals' only concern was to maximise their health or, more generally, to maximise their capabilities. Thaler and Sunstein (2008) use these criteria to justify intervention to mitigate the costs of obesity-inducing diets, smoking and drinking. They refer to health risks. They argue that: '*With respect to diet, smoking, and drinking, people's current choices cannot reasonably be claimed to be the best means of promoting their well-being.*' (p. 7). The problem is that individuals may prefer a less than perfectly healthy life (in terms of diet and in terms of exercise). They might prefer to drink alcohol and to smoke, even when they are fully informed about the attendant risks to their health. The 'libertarian paternalist' approach is to intervene to maximise welfare as judged by others.

B.9.5.2 Are there obligations if governments assume responsibility?

A second problem is whether governments can be comfortable with the responsibility they assume when they nudge individuals. The Nobel Laureate, Daniel Kahneman (1999), noted: '*... in the context of choices that are offered by a benevolent agency, the default is likely to be perceived as an implicit recommendation about what is best for most people ...*' (p. 211). He added that '*... the inevitability of framing effects raises subtle and difficult ethical issues for the implementation of policy ...*' (p. 212).

Thaler and Sunstein (2008) are confident that it is the right thing to do because they are confident that outcomes will be improvements. When they advocate policy to nudge individuals to increase investment in equities they argue that '*... over a twenty-year period, stocks are almost certain to go up.*' (p.121). They are confident that it is always a mistake to hold assets that are less risky. But there is no guarantee that experience in the past will be repeated in the future. It is possible that governments, themselves, may make mistakes?

There is evidence that a nudge is interpreted as an endorsement. When commenting on saving for retirement, Armour and Daly (2008:2) indicate that: '*Data suggest that even when no explicit guidance is provided, employees infer that their employer's default contribution rate of investment fund choices is 'safe', suggested and optimal*'. The problem is particularly important when focusing on long-term commitments and long-term expectations. Governments can make the disclaimer that they nudge individuals in a very general way (e.g. to save, diet and exercise) but for policy to be effective nudge must be more specific. There may be ethical and legal implications if intervention is based on over-confidence.

⁵⁸ The authors consider the determinants of happiness and they argue that: '*In addition to policies that maintain income, other effective policies might seek to improve the quality of leisure directly.*' (p.244), e.g. provision of libraries and other leisure services.

B.9.5.3 How are different group interests to be taken into consideration?

If policy is designed to nudge, some groups may benefit more than others:

- Nudge may be more significant for some individuals than for others. Consider the responsibility policy-makers assume when they design a default option to encourage workers to save for a pension. A default might influence the choice of two groups. In the first group, workers may feel that they do not have the commitment to manage their own portfolio. In the second group, workers may feel that they have the commitment to manage their own fund portfolio but that they have insufficient knowledge. How should the default be introduced? Whose preferences assume greater importance?

There is evidence that nudge may advantage different groups differently. Tapia and Yermo (2007) argue that in Australia the default has been designed to minimise employers' costs. In Latin American countries policy has been designed to follow the life cycle profile by moving from lower to riskier funds as savers get older.

- A different conflict of interest arises when policy is designed to respond to the political pressures that are exerted by producers in the economy. Producers have their own interest in lobbying governments to nudge. Producers (e.g. of pension funds, or of exercise machines) are likely to press governments to nudge individuals to consume more of their products. Producer groups already spend to advertise their products and to nudge individuals to consume more of their products. The question is where to draw the line between the nudges individuals experience from extensive private sector advertising campaigns and the nudges that come from government.

The distinction is important because there is evidence that producers exploit behavioural anomalies, e.g. loss aversion, to encourage individuals to 'over consume' their products. When book clubs offer 'free trials' they are designed to exploit the endowment effect (the more that individuals feel attached to the books they receive – an **endowment effect** – the more they are reluctant to part with them). The response of governments is to protect consumers. Governments usually use legislation to mitigate the producers' exploitation of behavioural anomalies, e.g. legislating that consumers can return unsolicited items at no cost (and that they can rely on 'cooling off' periods to mitigate the mistakes they may make). Cullis and Jones (2008) describe the importance of public policies that mitigate producer exploitation of behavioural anomalies. The danger is that producers may also exploit situations if governments fail to assess the extent to which policies 'should' be designed to nudge.

8.5.4 How are the impacts of nudge to be estimated and monitored?

Policy designed to nudge different individuals will have different impacts. Lusardi (1999) notes that: '*Poorly educated workers, those in bad health, and those who worked less than thirty weeks in the previous year ... are likely both to expect to retire relatively young and to have little wealth ...*' (p.96). As their decision is based on other considerations, e.g. poor health, nudge is likely to have less impact on this group than on better educated, self-employed professionals who enjoy better health.

There is a U-shaped pattern of inactivity related to wealth in the UK. Those in the middle of the wealth distribution are less likely to be in work well before the SPA. For further analysis see Banks (2006). If the intention is to nudge these individuals, it is important to recognise that nudge may have very little impact at the bottom of the wealth distribution (where individuals are inactive because they have poor health and disability). If policy is to focus on low-income individuals who are inactive in their 50s, policy may need to be designed specifically to motivate this group (as compared with policy designed to motivate higher-income individuals who are still working at the age of 65 years).

If there is a case for comparing the impact that nudge might produce on different groups in the community, there is also a case for monitoring the impact that nudge is likely to exert over time. If it is difficult to nudge some individuals because the physical demand of their work are particularly demanding, this distinction is changing over time. Burtless (1999:39), states that (in the USA) there is ‘... no convincing evidence that the health of 62-year-olds or 65-year olds has been declining over the period in which their labor force participation rates have fallen ...’ (p.39) and he argues that ‘... *the physical demands of work are now easier to meet than they were in the past ...*’ (p.39).

With evidence that ubiquitous behavioural anomalies are systematic, policy can be designed to correct ‘individual failure’. But if it is possible to design policies to change behaviour, it is also important to be aware of all of the implications of policies that are designed to nudge.

References

- Adams, J. and White, M. (2005). Why don't stage-based activity promotion interventions work? *Health Education Research* 20(2) 237-243.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl and J. Beckmann (Eds.), *Action control: From cognition to behavior*. Berlin, Heidelberg, New York: Springer-Verlag.
- Bandura, A. (1977). *Social Learning Theory*. General Learning Press.
- Becker, M.H. (1974). The Health Belief Model and Personal Health Behavior. *Health Education Monographs*. Vol. 2 No. 4.
- Bostrom, A., Atman, C.J., Fischhoff, B. and Morgan, M.G. (1994). Evaluating risk communications: Completing and correcting mental models of hazardous processes. Part 2. *Risk Analysis*, 14, 789-798.
- Breakwell, G.M. (2007). *The Psychology of Risk: An Introduction*.
- Bytheway (2005). Ageism and Age Categorization. *Journal of Social Issues*; 361-374.
- Covello, Vincent T./Pavlova, Maria T. (2004). *Effective Risk Communication*. Kluwer Academic Pub.
- Craik, K. J. W. (1943). *The Nature of Explanation*. Cambridge.
- Daniel, K., Harris, C. and Brimer, R.B. (2002). Understanding the risks of stress: A cognitive approach. Health and Safety Executive (2002). Contract Research Report 427.
- Darnton, A. (2008). *Practical Guide: An overview of behaviour change models and their uses*. Government Social Research.
- Davison C., Davey Smith, G., Frankel, S.J. (1991). Lay epidemiology and the prevention paradox, the implications of coronary candidacy for health educators. *Social Health Illness*. 13:1-19.
- Department of Health (2009). *Health Action Zones: Learning to make a difference Findings from a preliminary review of Health Action Zones and proposals for a national evaluation*.
- Department of Work and Pensions (2009). *Individuals' attitudes and likely reactions to the workplace pension reforms*. DWP Research Report No. 669.
- Dolan, P., Hallsworth, M., Halpern, D., King, D. and Vlaev, I. (2010). *Mindspace. Influencing behaviour through public policy*. Institute for Government.
- Fischhoff, B., Bostrom, A., Jacobs, B., Quadrel, M. (1997). *Risk Perception and Communication*. Oxford Textbook of Public Health. Oxford University Press.
- Fishbein, M. and Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Health and Safety Executive (2011). *What are the Management Standards: What are the Management Standards for work related stress?* <http://www.hse.gov.uk/stress/standards/>
- Hedges. A., Sykes, W. and Groom, C. (2009). *Extending working life: Changing the culture, Qualitative research into effective messages*. Department for Work and Pensions Research Report No 557.
- Hupport, F. (2004). A population approach to positive psychology: the potential for population interventions to promote well-being and prevent disorder. In *Positive Psychology in Practice* by Martin E. P. Seligman (Foreword), P. Alex Linley (Editor), Stephen Joseph (Editor), Wiley.

- Jepson, R., Harris, F., MacGillivray, S., Kearney, N. and Rowa-Dewar, N. (2006). A review of the effectiveness of interventions, approaches and models at individual, community and population level that are aimed at changing health outcomes through changing knowledge, attitudes and behaviour. London: National Institute for Health and Clinical Excellence.
- Kahneman, D. and Tversky, A. (1974). Judgment under Uncertainty: Heuristics and Biases. *Science* 27 September 1974: Vol. 185 no. 4157 pp. 1124-1131.
- Metcalfe, H. and Meadows P. (2006). 'Survey of employers' policies, practices and preferences relating to age'. DWP Research Report No. 325.
- Metcalfe, H. and Meadows, P. (2010). Second survey of employers' policies, practices and preferences relating to age, 2010. DWP Research Report No. 682.
- McNair, S. and Flynn, M. (2005). The Age Dimension of Employment Practices. Employer Case Studies. Department of Trade and Industry Employment Relations Research Series No 42. <http://www.berr.gov.uk/files/file11436.pdf>
- McNair, S. Flynn, M. and Dutton, N. (2007). Employer responses to an ageing workforce: a qualitative study. Department of Work and Pensions. Report Number 455 <http://statistics.dwp.gov.uk/asd/asd5/reports2007-2008/rrep455.pdf>
- Morgan, D. L. (Ed). (1993). Successful focus groups: Advancing the state of the art, Sage focus editions, Vol. 156 (pp. 3-19). Thousand Oaks, CA, US: Sage Publications.
- Morgan, M.G., Fischhoff, B., Bostrom, A. and Atman, C.J. (2002). Risk Communication A Mental Models Approach. Cambridge, New York.
- NICE. (2007). Behaviour change at populations, community and individual levels. London. National Institute for Clinical Excellence.
- Pensions Policy Institute. (2009). Retirement income and assets: how can pensions and financial assets support retirement? www.pensionspolicyinstitute.org.uk
- Pidgeon, N., Hood, C., Jones, D., Turner, B. and Gibson R. (1992). Risk Perception in Royal Society Study Group on Risk Assessment, Analysis, Perception and Management. The Royal Society, London.
- Pidgeon, N. F., Kasperson, R. and Slovik. P. (2006). The Social Amplification of Risk Cambridge.
- Prochaska, J.O. and Di Clemente, C.C. (1986). Towards a comprehensive model of change. In: W.R. Miller and N. Heather (Eds), Treating addictive behaviours: Processes of change. New York: Plenum Press.
- Rockhill, B. (2004). Theorizing about Causes at the Individual Level While Estimating Effects at the Population Level: Implications for Prevention. *Epidemiology and Society*. 16(1). 124-129.
- Rossi, H., Lipsey, M.W. and Freeman, (2004). Evaluation: A Systematic Approach. Sage.
- Schwarzer, R. (2008). Modelling health behavior change: How to predict and modify the adoption and maintenance of health behaviors. *Applied Psychology: An International Review*, 57(1), 1-29.
- Thaler, R.H. and Sunstein, C.R. (2008). Nudge: Improving decisions about health, wealth and happiness. Yale University Press.
- Thomas, A., Jones, J., Davies, S. and Chilvers, D. (2009). Individuals' attitudes and behaviours around planning for later life. Findings from qualitative and quantitative research. Department of Work and Pensions Working Paper No 72. <http://research.dwp.gov.uk/asd/asd5/WP72.pdf>

Tversky, A., Kahneman, D. (1981). The Framing of decisions and the psychology of choice. *Science* 211 (4481): 453–458.

Weyman, A.K. and Kelly, C.J. (1999). Risk Perception and Risk Communication. A review of literature. Health and Safety Executive, Contract Research Report 248. http://www.hse.gov.uk/research/crr_pdf/1999/CRR99248.pdf

Weyman, A.K. and Williamson, J. (2007). Veterinary Medicines, Gauging Public Concern – Report to the Food Standards Agency.

Appendix B

Aaron, H.J. (1999). Retirement, retirement research and retirement policy, pp.43-81 in H.J. Aaron (ed) *Behavioral Dimensions of Retirement Economics*. Brookings Institution; Washington DC: Russell Sage Foundation, New York.

Abrams, D., Eilola, T. and Swift, H. (2009). Attitudes to age in Britain 2004-08: Research Report 599. London: Department for Work and Pensions.

Adams, J. and White, M. (2005). Why don't stage-based activity promotion interventions work? *Health Education Research* 20(2) 237-243.

Ainslie, G. (1975). Specious reward: A behavioral theory of impulsiveness and impulse control. *Psychological Bulletin* 82, 463-496.

Ainslie, G. and Haslam, N. (1992). Hyperbolic discounting, pp in G Loewenstein and J Elster (eds) *Choice Over Time*. Russell Sage: New York.

Ajzen, I. and Fishbein, M. (1980). *Understanding Attitudes and Predicting Human Behavior*, Prentice Hall, Englewood New Jersey.

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl and J. Beckmann (Eds.), *Action control: From cognition to behavior*. Berlin, Heidelberg, New York: Springer-Verlag.

Alexander, G.J., Jones, J.D. and Nigro P.J. (1998). Mutual Shareholders characteristics investor knowledge, and sources of information, *Financial Services Review* 7(4):301-316.

AON Consulting. (2007). *European Pensions Barometer. Report: Measuring the pressure on EU pensions systems. 2007 European Pensions Barometer Report.* www.imsersomayores.csic.es/documentos/.../pensions-barometer-report.pdf

Armour, P. and Daly, M. (2008). FRBSF Economic Letter 16 June 2008 1-3.

Armitage, C.J. and Conner, M. (2000). Social cognition models and health behaviour: A structured review, *Psychology and Health*, 15:2, 173 — 189. DOI: 10.1080/08870440008400299 URL: <http://dx.doi.org/10.1080/08870440008400299>

Arrowsmith, J. and McGoldrick, A.E. (2001). Age discrimination: Management views and organisational practice. In Branine, M. and Glover, I. (eds.), *Ageism, Work and Employment*. Aldershot: Avebury. [Cited in Smeaton *et al.* 2009].

Association of Consulting Actuaries 2010. Survey on auto-enrolment and NEST. London: ACA.

Bandura, A. (1977). *Social Learning Theory*. General Learning Press.

- Banks, J., Blundell, R. and Tanner, S. (1998). Is there a retirement savings puzzle, *American Economic Review* 88 769-88.
- Banks, J. (2006). Economic capabilities choices and outcomes at older ages, *Fiscal Studies* 27(3):281-311.
- Banks, J., Blundell, R. and Tanner, S. (1998). Is there a retirement savings puzzle? *American Economic Review*, 88(4) 769-88.
- Banks, J. and Oldfield, Z. (2007). Understanding pensions: cognitive function numeracy and retirement saving, *Fiscal Studies* 28(2):143-70.
- Banks, J. and Smith, S. (2006). Retirement in the UK, *Oxford Review of Economic Policy* 22 (1) 40-56.
- Barr, N. and Diamond, P. (2006). *The Economics of Pensions*. Oxford University Press; Oxford.
- Bardassi, E., Jenkins, S.P. (2002). *Income in later life: Work history matters*, Bristol: Policy Press and Joseph Rowntree Foundation.
- Becker, M.H. (1974). The Health Belief Model and Personal Health Behavior. *Health Education Monographs*. Vol. 2 No. 4.
- Benartzi, S. and Thaler, R. (2001). Naive diversification strategies in retirement saving plans, *American Economic Review* March 91(1) 79-98.
- Benartzi, S. and Thaler, R. (2007). *Heuristics and Biases in Retirement Savings Behavior*. mimeo.
- BERR (Department for Business, Enterprise and Regulatory Reform). (2008). Meet the need for work-life balance *Business Link* <http://www.businesslink.gov.uk/bdotg/action/detail?type=RESOURCES&itemId=1074410887>
- Bertrand, M., Mullainathan, S. and Shafir, E. (2006). Behavioral economics and marketing in aid of decision making among the poor. *Journal of Public Policy and Marketing* 25,8-23.
- Beshears, J., Choi, H., Laibson, D. and Madrian, B. (2006). *Simplification and Saving*. National Bureau of Economic Research Working Paper No 12659.
- Black, Dame, C. (2008). *Working for a healthier tomorrow: Dame Carol Black's Review of the Health of Britain's working age population*. London: TSO.
- Black, Dame, C. (2008b). Stakeholder event – response to questions from the floor, 20th May 2008; Chelsea Football Ground, London.
- Blundell, R., Emmerson, C., Wakefield, M. (2006). *The Importance of Incentives in Influencing Private Retirement Saving: Known Knowns and Known Unknowns*, London: IFS.
- Bostrom, A., Atman, C.J., Fischhoff, B. and Morgan, M.G. (1994). Evaluating risk communications: Completing and correcting mental models of hazardous processes. Part 2. *Risk Analysis*, 14, 789-798.
- Bozio, A., Crawford, R., Emmerson, C. and Tetlow, G. (2010). Retirement outcomes and lifetime earnings: descriptive evidence from linked ELSA – NI data. Working Paper. London: Department for Work and Pensions.
- Breakwell, G.M. (2007). *The Psychology of Risk: An Introduction*.
- British Social Attitudes Survey. National Centre for Social Research (NatCen) <http://www.natcen.ac.uk>

- Brown, M. (2010). Attitudes toward Pensions and Retirement at Age 50: Initial Results from the National Child Development Study. Centre for Longitudinal Studies Working Paper 2010/12.
- Burtless, G. (1999). An economic View of retirement pp 7-42 in H. J. Aaron (ed) Behavioral Dimensions of Retirement Economics. Brookings Institution; Washington DC: Russell Sage Foundation, New York.
- Bytheway. (2005). Ageism and Age Categorization. *Journal of Social Issues*; 361-374.
- Cheema, A. and Soman, D. (2006). Malleable mental accounting: The effect of flexibility on the justification of attractive spending and consumption decisions, *Journal of Consumer Psychology* 16(1): 33-44.
- Choi, J., Laibson, D., Madrian, B. and Metrick, A. (2001a). Defined Contribution Pension Plan Rules: Participant Decisions and the Path of Least Resistance. NBER Working Paper 8655.
- Choi, J., Laibson, D., Madrian, B. and Metrick, A. (2001b). For Better or for Worse Default and 401(k) Savings Behaviour NBER Working Paper 8651.
- CIPD (2007). Flexible retirement and pension provision. CIPD response to the Department for Work and Pensions consultation. http://www.cipd.co.uk/publicpolicy/_flxrtmtpsn.htm?IsSrchRes=1
- Clery, E., McKay, S., Phillips, M., and Robinson, C. (2007). Attitudes to Pensions: The 2006 Survey. London: Department of Work and Pensions.
- Covello, V.T. and Pavlova, M.T. (2004). Effective Risk Communication. Kluwer Academic Pub.
- Blauner, R. (1964). Alienation and Freedom. The University of Chicago Press.
- Cox, T. (1993). Stress Research and Stress Management: Putting Theory to Work, HSE Contract Research Report 39 No. 6 1/1993, HSE Books.
- Craik, K. J. W. (1943). The Nature of Explanation. Cambridge.
- Cuddy, A., Norton, M. and Fiske, S. (2005). This old stereotype: The pervasiveness and persistence of the elderly stereotype. *Journal of Social Issues*, 265-283.
- Cullis, J. and Jones, P. (2008). How Big Should Government Be? pp 281-303 in A Lewis (ed) The Cambridge Handbook of Psychology and Economic Behaviour. Cambridge Cambridge University Press.
- Dalen, H. P. V., Henkens, K., Hendrikse, W. and Schippers, J. (2010). Do European employers support later retirement?. *International Journal of Manpower*, 31, 360-373.
- De Martino, B., Kumaran, D., Seymour, B. and Dolan, R.J. (2006). Frames, biases, and rational decision-making in the human brain. *Science* 313, 684-687.
- Disney, R. and Hawkes, D. (2003). Why has employment recently risen among older workers in Britain? In: DICKENS, R., GREGG, P. and WADSWORTH, P. (eds.) The Labour Market Under New Labour: The State of Working Britain. London: Palgrave Macmillan.
- Daniel, K., Harris, C. and Brimer, R.B. (2002). Understanding the risks of stress: A cognitive approach. Health and Safety Executive (2002) Contract Research Report 427.
- Davison, C., Davey Smith, G., Frankel S.J. Lay epidemiology and the prevention paradox, the implications of coronary candidacy for health educators. *Social Health Illness*. 1991;13:1-19.
- Dearden, L. (1998). Ability, Families, Education and Earnings in Britain, London: IFS.

Department of Health (2009). Health Action Zones: Learning to make a difference Findings from a preliminary review of Health Action Zones and proposals for a national evaluation.

Department for Work and Pensions (2000). Research Report 193. Public attitudes to pensions and saving for retirement. Author: Mayhew, V.

Department for Work and Pensions (2005). Research Report 294. Providing pensions information and advice in the workplace where there is little or no employer contribution: Pilot evaluation findings based on survey and qualitative research. Authors Leston, J. and Watmough, M.

Department for Work and Pensions (2005). Research Report No 299 Extending working life: A review of the research literature Authors: Chris Phillipson and Allison Smith <http://campaigns.dwp.gov.uk/asd/asd5/rports2005-2006/rrep299.pdf>

Department for Work and Pensions (2007). Research Report No 434. Corporate Document Services Attitudes to pensions: The 2006 survey. Authors: Elizabeth Clery, Stephen McKay, Miranda Phillips and Chloe Robinson <http://www.dwp.gov.uk/docs/rrep434-1.pdf>

Department for Work and Pensions (2007). Research Report No 438. Live now, save later?

Young people, saving and pensions. Authors: Nick Pettigrew, Jayne Taylor, Caroline Simpson, Joe Lancaster and Richard Madden. <http://statistics.dwp.gov.uk/asd/asd5/rports2007-2008/rrep438.pdf>

Department of Work and Pensions (2008). Research Report No 528. Employer attitudes to risk sharing in pension schemes: a qualitative study, Authors: Thomas, A. and Allen, A. Department of Work and Pensions London. <http://statistics.dwp.gov.uk/asd/asd5/rports2007-2008/rrep528.pdf>

Department of Work and Pensions (2008). Research Report No 531. Encouraging labour market activity among 60-64 year olds by: Authors: Sarah Vickerstaff, Wendy Loretto, Jenny Billings, Patrick Brown, Lavinia Mitton, Tina Parkin and Phil White. <http://statistics.dwp.gov.uk/asd/asd5/rports2007-2008/rrep531.pdf>

Department for Work and Pensions (2009). Research Report No 557. Extending working life: changing the culture Qualitative research into effective messages. Authors: Alan Hedges and Wendy Sykes in association with Carola Groom. <http://campaigns.dwp.gov.uk/asd/asd5/rports2009-2010/rrep557.pdf>

Department for Work and Pensions (2009). Research Report No 562. Incentives to save for retirement: understanding, perceptions and behaviour. A literature review. Authors: Roger Wicks and Sarah Horack. <http://campaigns.dwp.gov.uk/asd/asd5/rports2009-2010/rrep562.pdf>

Department for Work and Pensions (2009). Research Report No 599. Attitudes to age in Britain 2004-08. Authors: Dominic Abrams, Tiina Eilola and Hannah Swift. <http://research.dwp.gov.uk/asd/asd5/rports2009-2010/rrep599.pdf>

Department of Work and Pensions (2010). Research Report No 673. Pathways to retirement: The influence of employer policy and practice on retirement decisions. Authors: Gareth Morrell and Rosalind Tennant. <http://statistics.dwp.gov.uk/asd/asd5/rports2009-2010/rrep673.pdf>

Department of Work and Pensions (2010). Research Report No 669. Individuals' attitudes and likely reactions to the workplace pension reforms. <http://statistics.dwp.gov.uk/asd/asd5/rports2009-2010/rrep669.pdf>

Dolan, P., Hallsworth, M., Halpern, D., King, D., and Vlaev, I. (2010). Mindspace. Influencing behaviour through public policy. Institute for Government.

- Douglas, M. (1982). *Cultural Bias*. In the active voice London, Routledge and Keegan-Paul.
- Economist (2010a). When I'm 66: And the Reforms Won't Stop There. August 26.
- Economist (2010b). After The Protests: As the Dust Settles, What Have the French Learned About Themselves, 28 October 2010.
- English Longitudinal Study of Ageing (ELSA) (2008-9). National Centre for Social Research. NatCen <http://www.natcen.ac.uk/elsa/>
- Equality and Human Rights Commission. (2009). Research Report 43. Older workers: employment preferences, barriers and solutions. Authors: Smeaton, D., Veferis, S. and Sahin-Dikmen, M.
- http://www.equalityhumanrights.com/uploaded_files/research/older_workers_employment_preferences_barriers_and_solutions_v2.pdf
- Equality and Human Rights Commission, (2010) Maitland A, Working Better: The over 50s, the new work generation, London: Equality and Rights Commission.
- Esser, I. (2005), Continued work or retirement? Preferred exit age in Western European countries. Stockholm: Institutet för Framtidsstudier.
- Fagley, N.S. and Miller P.M. (1990). The effect of framing on choice: Interactions with risk taking propensity, cognitive style, and sex. *Personality and Social Psychology Bulletin*, 16(3), 496-510.
- Fear, J. and Pace, G. (2008). Choosing not to choose: Making superannuation work by default. The Australia Institute, Discussion Paper No.1 03. www.tai.or!!.au
- Fetherstonhaugh, D. and Ross, L. (1999). Framing effect and income flow preferences in Decisions about Social Security, pp 187-210 in H J Aaron (ed) *Behavioral Dimensions of Retirement Economics*. Brookings Institution; Washington DC: Russell Sage Foundation, New York.
- Fevre, R., Robinson, A., Jones. T. and D. Lewis (2008). *Work Fit For All – Disability, Health And The Experience Of Negative Treatment In The British Workplace*, London: Equality and Human Rights Commission.
- Fischhoff, B. (1995). Risk perception and risk communication unplugged: Twenty years of process. *Risk Analysis* 15(2).
- Fischhoff, B. Bostron, A. Jacobs, B. Quadrel, M. (1997). *Risk Perception and Communication*. Oxford Textbook of Public Health. Oxford University Press.
- Fishbein, M. and Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Frank, R. G. and Lamiraud, K. (2009). Choice, price competition and complexity in markets for health insurance. *Journal of Economic Behavior and Organization* 71, 550-562.
- Garey, M. R. and Johnson, D. S. (1979). *Computers and Intractability: A Guide to the Theory of NP-Completeness*. New York: WH Freeman.
- Gazzale, R.S. and Walker, L. (2008). Behavioral Biases in Annuity Choice: An Experiment. <http://ideas.repec.org/p/wil/wileco/2009-01.html#provider>
- Gigerenzer, G. and Goldstein, D. G. (1996). Reasoning the fast and frugal way: Models of bounded rationality. *Psychological Review* 103, 650-669.

- Goldstein, D. G., and Gigerenzer, G. (2002). Models of ecological rationality: the recognition heuristic, *Psychological Review*, 109: 75–90.
- Goda, S. and Flaherty, C. 2010. Incorporating Employee Heterogeneity into Default Rules for Retirement Plan Selection. Cambridge, MA: National Bureau of Economic Research.
- Goldthorpe, J.H., Lockwood, D., Bechhofer, F. and Platt, J. (1968). *The Affluent Worker: Attitudes and Behaviour* Cambridge: Cambridge University Press.
- Gough, O. and Hick, R. (2009). Ethnic minorities, retirement planning and Personal Accounts. *International Journal of Sociology and Social Policy*, 29, 488–497.
- Gustmann, A.; Steinmeier, T. and Tabatabai, N. (2009). Do workers know about their pension plan type? Comparing workers and employers' pension information, in A Lusardi (ed) *Overcoming the Savings Slump: How to Increase the Effectiveness of Financial Education and Saving Programmes* pp 47–81 Chicago: Chicago University Press.
- Health and Safety Executive (2000). Organisational interventions for work stress – A risk management approach. Health and Safety Executive Contract Research Report 286.
- Health and Safety Executive (2005). Survey of Workplace Absence Sickness and (Ill) Health (SWASH) Report on emergent headline findings. www.hse.gov.uk/sicknessabsence/swash2005.pdf.
- Health and Safety Executive (2006). Psychosocial Working Conditions in Britain in 2006. <http://www.hse.gov.uk/>
- Health and Safety Executive (2011). What are the Management Standards: What are the Management Standards for work related stress? <http://www.hse.gov.uk/stress/standards/>
- Health and Safety Laboratory HSE Review of the Risk Prevention Approach to Occupational Health Applying Health Models to 21st Century Occupational Health Needs Health Models Information Pack. Authors: Lunt, J.; Bowen, J. and Lee, R. HSL/2005/57.
- Hedges, A., Sykes, W. and Groom, C. (2009). Extending working life: Changing the culture, Qualitative research into effective messages Department for Work and Pensions. Research Report No 557.
- Heiner, R.A. (1983). The origin of predictable behaviour, *American Economic Review* 73; 560–595.
- Hills, J. (2006). A New Pension Settlement for the Twenty First Century? The UK Pension Commission Analysis and Proposals, *Oxford Review of Economic Policy*, 22 (1):113–132.
- Hirsch, D. 2003. *Crossroads after 50: Improving choices in work and retirement*. York: Joseph Rowntree Foundation.
- Hupport, F. (2004). A population approach to positive psychology: the potential for population interventions to promote well-being and prevent disorder. In *Positive Psychology in Practice* by
- Iyengar, S. S. and Lepper, M. (2000). When choice is demotivating: Can one desire too much of a good thing? *Journal of Personality and Social Psychology* 79: 995–1006.
- Iyengar, S. S., Jiang, W., and Huberman, G. (2003). How Much Choice is Too Much?: Contributions to 401(k) Retirement Plans Pension Research Council Working Paper PRC WP 2003–10, University of Pennsylvania.
- Jappelli, T. (2010). Economic literacy: An international comparison, *Economic Journal* vol. 120(548): F429–F451.

- Jepson, R., Harris, F., MacGillivray, S., Kearney, N. and Rowa-Dewar, N. (2006). A review of the effectiveness of interventions, approaches and models at individual, community and population level that are aimed at changing health outcomes through changing knowledge, attitudes and behaviour. London: National Institute for Health and Clinical Excellence.
- Jones, E. E., and Nisbett, R. E. (1971). *The actor and the observer: Divergent perceptions of the causes of behavior*. New York: General Learning Press.
- Jones, P. and Cullis, J. (2000). Individual failure and the analytics of social policy, *Journal of Social Policy*, 29(1): 73-93.
- Kelly, M. 2007. Trust and confidence in pensions and pension providers. Research Summary. London: Department for Work and Pensions.
- Kahneman, D., Miller, D.T. (1986). Norm theory: Comparing reality to its alternatives. *Psychological Review* 93: 136-153.
- Kahneman, D. and Tversky, A. (1974). Judgment under Uncertainty: Heuristics and Biases. *Science* 27 September 1974: Vol. 185 no. 4157 pp. 1124-1131.
- Kahneman, D., and A. Tversky, (1984). Choices, values and frames, *American Psychologist* 39: 341-350.
- Kahneman D (1999). Comment, pp.210-13 in H J Aaron (ed) *Behavioral Dimensions of Retirement Economics*. Brookings Institution; Washington DC: Russell Sage Foundation, New York.
- Kasperson, R. E., Renn, O. and Slovic, P. (1988). Social amplification of risk: a conceptual framework, *Risk Analysis* 8, 177-187.
- King Dyball *et al.*, (2005). Public protection consultation study. Health and Safety Executive Research Report 346. HSE Books.
- Lantz, H.R. (1971). *People of coal town*. Carbondale. Southern Illinois Univ Press.
- Lazear, E. (1979). Why is there mandatory retirement, *Journal of Political Economy* 87: 1261-1284.
- Levin, L. (1998). Are assets fungible? Testing the Behavioral Theory of Life-Cycle Savings, *Journal of Economic Behavior and Organization* 36: 59-83.
- Lissenburgh, S. and Smeaton, D. (2003), *The Role of Flexible Employment in Maintaining Labour Market Participation and Promoting Job Quality*, York: Joseph Rowntree Foundation.
- Lloyd, J. 2010. Early access to pension saving. London: Social Market Foundation.
- Loewenstein, G., Prelec, D. and Weber, R. (1999). What me worry? A psychological perspective on economic aspects of retirement, pp215-246 in H. J. Aaron (ed) *Behavioral Dimensions of Retirement Economics*. Brookings Institution; Washington DC: Russell Sage Foundation, New York.
- Loretto, W., Vickerstaff, S. and White, P. Older workers and options for flexible work. Equal Opportunities Commission, Working Paper Series No. 31.
- Lusardi, A. (1999). Information expectations and savings for retirement pp81-115 in H J Aaron (ed) *Behavioral Dimensions of Retirement Economics*. Brookings Institution; Washington DC: Russell Sage Foundation, New York.
- Lusardi, A. (2008). *Households Saving Behaviour: the Role of Literacy, Information and Financial Education Programs*, NBER Working Paper No 13824.

- MacInnes, T., Kenway, P. and Parekh, A. (2009). Monitoring poverty and social exclusion. Joseph Rowntree Foundation. <http://www.jrf.org.uk/publications/monitoring-poverty-2009>
- McNair, S. and Flynn, M. (2005). The Age Dimension of Employment Practices. Employer Case Studies. Department of Trade and Industry Employment Relations Research Series No 42. <http://www.berr.gov.uk/files/file11436.pdf>
- McNair, S. Flynn, M. and Dutton, N. (2007). Employer responses to an ageing workforce: a qualitative study. Department of Work and Pensions. Report Number 455 <http://statistics.dwp.gov.uk/asd/asd5/reports2007-2008/rrep455.pdf>
- Maitland, A. 2010. Working Better: The over 50s, the new work generation. Manchester: Equality and Human Rights Commission.
- Madrian, B.C. and Shea, D.F. (2001). The power of suggestion: Inertia in 401(k) participation and savings behaviour, *Quarterly Journal of Economics* 116(3): 1149-87.
- Martin, E. P. Seligman (Foreword), P. Alex Linley (Editor), Stephen Joseph (Editor), Wiley (2004).
- Meadows, P. (2003). Retirement Ages in the UK: A Review of the Literature DTI Employment Relations Research Series No 18.
- Merrill, J. (1992). A test of our society; how and for whom we finance long term care, *Inquiry* 29:176-87.
- Mitchell, O. S. and Fields, G. S. (1984). The economics of retirement behavior, *Journal of Labor Economics* 2 (1): 84-105.
- Modigliani, F. and Brumberg, R. (1954). Utility analysis and the consumption function: An interpretation of cross-section data, in K.K. Kurihara (ed) *Post Keynesian Economics*. Brunswick NJ: Rutgers University Press.
- Morgan, D. L. (Ed), (1993). *Successful focus groups: Advancing the state of the art*, Sage focus editions, Vol. 156 (pp. 3-19). Thousand Oaks, CA, US: Sage Publications
- Morgan, M.G.; Fischhof, B., Bostrom, A. and Atman, C.J. (2002). *Risk Communication A Mental Models Approach*. Cambridge, New York.
- National Association of Pension Funds (NAPF) 2010a. *Fit for the Future*. London: National Association of Pension Funds.
- National Association of Pension Funds 2010b. *Workplace Pensions Survey March 2010*. National Association of Pension Funds.
- National Institute for Clinical Excellence (NICE) (2007). *Behaviour change at populations, community and individual levels*. London. National Institute for Clinical Excellence.
- Newton, B., Hurstfield, J., Miller, L. and Bates, P. (2005). *Training and Mixed-Age Workforce*. Brighton, IES. <http://www.emeraldinsight.com/journals.htmarticleid=1545975andshow=abstract>
- Newton, B. (2006) *Training an age-diverse workforce*, *Industrial and Commercial Training*, Vol. 38 Iss: 2, pp.93 – 97.
- Nesbitt S, Neary D, (2001) *Ethnic minorities and their pensions decisions*
A study of Pakistani, Bangladeshi and white men in Oldham. York: Joseph Rowntree Foundation.

- O' Donoghue, T. and Rabin, M. (1999). Procrastination in preparing for retirement. 125-156 in H J Aaron (ed) Behavioral Dimensions of Retirement Economics. Brookings Institution; Washington DC: Russell Sage Foundation, New York.
- ONS, (2008). Population Trends 134 London: Office for National Statistics.
- Orszag, P. (2008). Behavioral Economics: Lessons from Retirement Research for Health Care and Beyond (www.cbo.gov/ftpdocs/96xx/doc9673/Presentation_RRC.1.1.1)
- Park, J. 2010. Health factors and early retirement among older workers. Perspectives. Statistics Canada.
- Parker, G. and Clarke, H. (1997). Will you still need me, will you still feed me? – Paying for care in old age Social Policy and Administration 31(2): 119-35.
- Parker, G. and Clarke, H. (1998). Paying for long term care in the UK: policy theory and evidence in P Taylor Gooby (ed.) Choice and Public Policy: The Limits to Welfare Markets Macmillan London.
- Pensions Bill (2011). House of Commons, Statutory Instrument May.
- <http://www.dwp.gov.uk/docs/pensions-bill-2011-summary-of-impacts.pdf>
- Pensions Commission (2004). Pensions: Challenges and Choices: First Report of the Pensions Commission, London, TSO.
- Pensions Commission (2005). A New Pension Settlement for the Twenty First Century. Second report of the Pensions Commission, London, TSO.
- Pensions Policy Institute (2009). Retirement income and assets: how can pensions and financial assets support retirement? www.pensionspolicyinstitute.org.uk
- Performance and Innovation Unit (2000). Winning the Generation Game. Improving opportunities for people aged 50–65 in work and community activity. April 2000. www.civilservice.gov.uk/Assets/generationdocument_tcm6-2218.pdf
- Petts, J. (1998). Trust and waste management information. Expectation versus observation. J of Risk Research; 1(4) 307-320.
- Pettigrew, N., Taylor, J., Lancaster, J. and Madden, R. (2007). Live now, save later? Young people, saving and pensions, DWP Research Report No. 438, HSMO, Norwich.
- Pfeifer, C., Janssen, S., Yang, P. and Backes-Gellenr, U. (2010). Training participation of an aging workforce in an internal labour market. Hannover: Leibnez Universitat.
- Phillipson, C. (2002). Transitions from work to retirement: Developing a new social contract. Bristol: Joseph Rowntree Trust, Policy Press.
- Phillipson, N, C. and Smith, A. (2005). Extending working life: A review of the research literature. London: Department for Work and Pensions.
- Pidgeon, N.; Weyman A.K. Walls. J. and Horlick-Jones, T. (2003a). Perceptions of and trust in the Health and Safety Executive as a risk regulator. Health and Safety Executive Research Report 100. HSE Books.
- Pidgeon, N., Kasperson R.E. and Slovic, P. (2003b). The Social Amplification of Risk. Cambridge University Press.

- Pidgeon, N., Hood, C., Jones, D., Turner, B. and Gibson R. (1992). Risk Percetion in Royal Society Study Group on Risk Assessment, Analysis, Perception and Management. The Royal Society, London.
- Pidgeon, N. F.; Kasperson, R. and Slovik. P. (2006) The Social Amplification of Risk Cambridge.
- Piu 2000. Winning the Generation Game. London: Performance and Innovation Unit.
- Porcellato, L., Carmichael, F., Hulme, C., Ingham, B. and Prashar, A. 2010. Giving older workers a voice: constraints on the employment of older people in the North West of England. *Work, Employment and Society*, 24, 85-103.
- Prochaska, J.O. and Di Clemente, C.C. (1986). Towards a comprehensive model of change. In: W.R. Miller and N. Heather (Eds), *Treating addictive behaviours: Processes of change*. NewYork: Plenum Press.
- Rockhill, B. (2004). Theorizing about Causes at the Individual Level While Estimating Effects at the Population Level: Implications for Prevention. *Epidemiology and Society*. 16(1). 124-129.
- Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (vol. 10). New York: Academic Press.
- Rossi, H.; Lipsey, M.W. and Freeman, (2004). *Evaluation: A Systematic Approach*. Sage.
- Samuelson, W. and Zeckhauser, R. (1988). Status quo bias in decision making. *Journal of Risk and Uncertainty* 1:7-59.
- Scheffrin, H. and Statman, M. (1985). The disposition effect to sell winners too early and ride losers too long. *Journal of Finance* 40:777- 790.
- Scheffrin, H.M. and Thaler, R. H. (1988). The behavioural life cycle hypothesis, *Economic Inquiry* 26: 609-43.
- Schultz, E. E. (1995). Offered a lump sum. Many retirees blow it and risk their future, *Wall Street Journal* July 31, A1, A6.
- Schwarzer, R. (2008). Modeling health behavior change: How to predict and modify the adoption and maintenance of health behaviors. *Applied Psychology: An International Review*, 57(1), 1-29.
- Sethi-Iyengar, S., Huberman, G. and Jiang, W. (2004). How much choice is too much? Contributions to 401(k) retirement plans, pp. 83-95 in O.S. Mitchell and S. Utkus (eds).
- Pension Design and Structure: New Lessons from Behavioral Finance*, Oxford: Oxford University Press.
- Shafir, E., Simonson, I. and Tversky, A. (1993). Reason-based choice. *Cognition* 49: 11-36.
- Shapira, Z. and Venezia, I. (2001). Patterns of behavior of professionally managed and independent investors. *Journal of Banking and Finance* 25: 1573-1587.
- Simon, H. A. (1955). A behavioral model of rational choice. *Quarterly J. of Economics* 69: 99-118.
- Simon, H. A. (1956). Rational choice and the structure of the environment. *Psychological Review* 63:129-138.
- Slovic, P. (1992). Perceptios of risk. Reflections on the Psychometric Paradigm. In *Social theories of risk*. Krimsky, S., Golding, D, and Westport, C.T. (eds), Cited in Health and Safety Executive Contract Research Report 171. HSE Books.

- Slovic, P. (1993). Perceived risk trust and democracy. *Risk Analysis* 13(6).
- Straus, M.A. (1962). Deferred gratification, social class and achievement syndrome. *American Sociological Review* 27(3); 326-335.
- Stutzer, A. and Frey, B.S. (2006). What Happiness Can Tell Us About Self control and Utility Misprediction. Working paper 267 University of Zurich and CREMA. January 23.
- Sugden, R. (2008). On Nudging: A review of Nudge: Improving Decisions about Health Wealth and Happiness, *International Journal of the Economics of Business* 16(3):365-73.
- Tapia, W. and Yermo, J. (2007). Implications of Behavioural Economics for Mandatory Individual Account Pensions Systems OECD Working Papers on Insurance and Private Pensions No 11 OECD Publishing. (doi: 10.1787/103002825851).
- Tausch, F., Potters, J. and Riedl, A. (2010). Preferences for Redistribution and Pensions: What Can We Learn from Experiments? Bann, Germany: Institute for the Study of Labor (IZA).
- Taylor, P. and Unwin, P. (2001). Age and participation in vocational education and training. *Work, Employment and Society*, 15, 763-779.
- Taylor, P. and Walker, A. eds (1998) Combating age barriers in employment a European portfolio of good practice. Office for Official Publications of the European Community.
- Thaler, R. H. (1980). Toward a positive theory of consumer choice. *Journal of Economic Behavior and Organization* 1: 39-60.
- Thaler, R. H. (1994). *Quasi Rational Economics*. New York: Russell Sage Foundation.
- Thaler, R. H. (1990). Saving, fungibility and mental accounts, *Journal of Economic Perspectives* 4 193-205.
- Thaler, R. H. (1999). Mental account matters, *J. of Behavioral Decision Making* 12: 183-206.
- Thaler, R. H. and Sunstein, C. R. (2003) Libertarian paternalism. *American Economic Review*, 93, 175-179.
- Thaler, R. H. and Sunstein, C. R. (2008) *Nudge: Improving Decisions About Health, Wealth and Happiness* Yale. University Press: New Haven and London.
- Thomas, A., Jones, J., Davies, S. and Chilvers, D. (2009). Individuals' attitudes and behaviours around planning for later life. Findings from qualitative and quantitative research. Department of Work and Pensions Working Paper No 72. <http://research.dwp.gov.uk/asd/asd5/WP72.pdf>
- Tversky, A. and Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science* 211, 453- 458.
- Tversky, A. and Shafir, E. (1992). Choice under conflict – the dynamics of deferred decision. *Psychological Science* 3: 358-361.
- Vickerstaff, S., Baldock, J., Cox, J., and Keen, L. (2004). *Happy Retirement: The Impact of Employers' Policies and Practice on the Process of Retirement*, Bristol: The Policy Press for the Joseph Rowntree Foundation.
- Walker, G., Simmons, P., Wynne, B., Irwin, A. (1998). Public perceptions or risks associated with major accident hazard. Health and Safety Executive CRR 194; HSE Books.

- Warr, P. (1983). *The Psychology of Work*, Taylor and Francis.
- Weber, E. (2003). Who's Afraid of a Poor Old Age? Risk Perception in Risk Management Decisions. Working Paper, Pension Research Council, Wharton School University of Pennsylvania.
- Weinstein, D. (1980). Unrealistic optimism about future life events. *Journal of personality and social psychology*. 39; 806-820.
- Weinstein, Neil D. (1984). Why it won't happen to me: perceptions of risk factors and illness susceptibility. *Health Psychology*, 3, 431-457.
- Weyman, A.K. and Kelly, C.J. (1999). Risk Perception and Risk Communication. A review of literature. Health and Safety Executive, Contract Research Report 248. http://www.hse.gov.uk/research/crr_pdf/1999/CRR99248.pdf
- Weyman, A.K. and Williamson, J. – Veterinary Medicines, Gauging Public Concern – Report to the Food Standards Agency, August 2007.
- Weyman, A.K. (2010). What about older and debilitated workers? in Well-being and working life: towards an evidence-based policy agenda. ESRC Seminar Series. Mapping the public policy landscape. <http://www.esrc.ac.uk/funding-and-guidance/collaboration/seminars/archive/well-being.aspx>
- Whiting, E. 2005. The labour market participation of older people. *Labour Market Trends*, 113, 285-296.
- Wicker, A.W. (1969). Attitudes versus actions: the relationship of verbal and overt behavioural responses to attitude objects. *J. of Soc. Issues* 25:41-78.
- Wicks, R. and Horack, S. 2009. Incentives to save for retirement: understanding, perceptions and behaviour. A literature review London: Department for Work and Pensions.
- Wynne, B. (1989). Frameworks of rationality in risk management: towards the history of naive sociology. In J. Braun (ed) *Environmental threats*. Bellhaven Press, London.

Core evidence base – Bibliography

The following sources were agreed with the DWP's Extending Working Life team as constituting the core of the review evidence base:

Arnstein Aassve and Cristina Ruggeri and Zsolt Spéder, 2009. Life expectancy, economic prosperity and retirement preferences, Working Papers 022, 'Dondena' Centre for Research on Social Dynamics (DONDENA), Università Commerciale Luigi Bocconi. http://ftp.dondena.unibocconi.it/WorkingPapers/Dondena_WP022.pdf

Association of Consulting Actuaries (ACA): Results of a survey on auto-enrolment. Link to access: <http://www.aca.org.uk/>

Bozio, A., Crawford, R., Emmerson, C. and Tetlow, G. Retirement outcomes and lifetime earnings: descriptive evidence from linked ELSA – NI data <http://research.dwp.gov.uk/asd/asd5/WP81.pdf>

Carlo, F. Arnstein Aassve, Cristina Ruggeri and Zsolt Spéder Dondena Centre for Research on Social Dynamics – Life expectancy, economic prosperity and retirement preferences. Dondena working papers. December 2009. Dondena Centre for Research on Social Dynamics Università Bocconi, via Guglielmo Röntgen 1, 20136 Milan, Italy <http://www.dondena.unibocconi.it>

Dalen, H.P. van (Tilburg University) Henkens, K. (Tilburg University) Hendrikse, W. Schippers, J.J. Do European employers support later retirement? Date: 2010
<http://d.repec.org/n?u=RePEc:ner:tilbur:urn:nbn:nl:ui:12-4068206andr=age>

Department for Work and Pensions Research Report No 299. Corporate Document Services.

Extending working life: A review of the research literature Chris Phillipson and Allison Smith
<http://campaigns.dwp.gov.uk/asd/asd5/rports2005-2006/rrep299.pdf>

Department for Work and Pensions Research Report No 434. Corporate Document Services Attitudes to pensions: The 2006 survey Elizabeth Clery, Stephen McKay, Miranda Phillips and Chloe Robinson
<http://www.dwp.gov.uk/docs/rrep434-1.pdf>

Department for Work and Pensions Research Report No 562. Incentives to save for retirement: understanding, perceptions and behaviour A literature review Roger Wicks and Sarah Horack
<http://campaigns.dwp.gov.uk/asd/asd5/rports2009-2010/rrep562.pdf>

Department for Work and Pensions Research Report No 557. Extending working life: changing the culture Qualitative research into effective messages Alan Hedges and Wendy Sykes in association with Carola Groom
<http://campaigns.dwp.gov.uk/asd/asd5/rports2009-2010/rrep557.pdf>

Department for Work and Pensions Research Report No 599. Attitudes to age in Britain 2004-08 Dominic Abrams, Tiina Eilola and Hannah Swift
<http://research.dwp.gov.uk/asd/asd5/rports2009-2010/rrep599.pdf>

Equality and Human Rights Commission Research Report 43. Older workers: employment preferences, barriers and solutions. Equality and Human Rights Commission
http://www.equalityhumanrights.com/uploaded_files/research/older_workers_employment_preferences_barriers_and_solutions_v2.pdf

Gopi Shah Goda and Colleen Flaherty. Manchester National Bureau for economic research (NBER: Default rules for retirement plan selection By: <http://papers.nber.org/papers/w16099>

Government Equalities Office December 2009. Monitoring update on the impact of the recession on various demographic groups
http://www.equalities.gov.uk/pdf/300165_GEO_ImpactRecession_acc.pdf

Hyde, Mark¹ Dixon, John² Can private pensions be trusted? A cross-national review. International Journal of Social Economics; 2010, Vol. 37 Issue 4, p276-292.

James Lloyd Early access to pension saving
http://www.smf.co.uk/assets/files/SMF_early_access_to_pension_saving_web.pdf

John Macnicol. International longevity centre [London] Report: Ageism and Age Discrimination: Some Analytical Issues, <http://www.ilcuk.org.uk/record.jsp?type=publicationandID=65>

Stephen Mc Nair – How Different is the Older Labour Market? Attitudes to Work and Retirement among Older People in Britain Social Policy and Society 5:4, 485–494 Printed in the United Kingdom 2006 Cambridge University Press doi:10.1017/S1474746406003198

NAPF Fit for the Future. NAPF's vision for pensions
http://www.napf.co.uk/PolicyandResearch/DocumentLibrary/~/_media/Files/Documents/Policy/2012_reforms/Fit_for_the_future_NAPFs_Vision_for_Pensions_72dpi_0410.ashx

National bureau of economic research Working paper series. Incorporating Employee heterogeneity into default rules for retirement plan selection Gopi Shah Goda Colleen Flaherty Manchester Working Paper 16099 <http://www.nber.org/papers/w16099>

National bureau of economic research. Preferences for Redistribution and Pensions: What Can We Learn from Experiments? Franziska Tausch Jan Potters Arno Riedl IZA DP No. 5090 July 2010.

Jungwee Park Health factors and early retirement among older workers, Perspectives on Labour and Income, Statistics Canada/Statistique Canada Article: Vol. 11, No. 6, June 2010, HTML and .pdf format, p. 5-13. <http://www.statcan.gc.ca/pub/75-001-x/2010106/article/11275-eng.htm>

Pensions policy institute. Retirement income and assets: outlook for the future https://www.pensionspolicyinstitute.org.uk/uploadeddocuments/2010/PPI_fourth_Retirement_income_and_assets_report_Feb_2010.pdf

Pensions policy institute. What are the main parties policies' on pensions? https://www.pensionspolicyinstitute.org.uk/uploadeddocuments/Briefing%20Notes/PPI_Briefing_Note_55_update_13.04.10.pdf

Pfeifer, Christian. Janssen, Simon. Yang, Philip. Backes-Gellner, Uschi Training Participation of an Aging Workforce in an Internal Labor Market Date: 2010-04 URL: <http://d.repec.org/n?u=RePEc:han:dpaper:dp-447andr=age>

Lorna Porcellato, Fiona Carmichael, Claire Hulme, Barbara Ingham and Arvin Prashar. Work, Employment and Society in the North West of England Giving older workers a voice: constraints on the employment <http://wes.sagepub.com/content/24/1/85>. Online version at: DOI: 10.1177/0950017009353659 Work Employment Society 2010 24: 85

Deborah Smeaton, Sandra Vegeris and Melahat Sahin-Dikmen Older workers: employment preferences, barriers and solutions Policy Studies Institute http://www.equalityhumanrights.com/uploaded_files/research/older_workers_employment_preferences_barriers_and_solutions_v2.pdf

Franziska Tausch, Jan Potters, and Arno Riedl. Preferences for Redistribution and Pensions. What can we Learn from Experiments? Centre for economic studies Institute for economic research (CESifo) University of Bonn Germany: http://www.cesifo-group.de/portal/page/portal/ifoHome/b-publ/b3publwp/_wp_abstract?p_file_id=17825

Tausch, Franziska (Maastricht University) By Potters, Jan (Tilburg University). Riedl, Arno (Maastricht University) New Economics Papers: Preferences for Redistribution and Pensions: What Can We Learn from Experiments? Date: 2010-07 URL: <http://d.repec.org/n?u=RePEc:iza:izadps:dp5090andr=age>

US Social security administration office of policy report 'Social Security Programs Throughout the World: Europe, 2010. <http://www.ssa.gov/policy/docs/progdesc/ssptw/2010-2011/europe/index.html>

This report summarises empirical findings on drivers and barriers to motivating extending working life and broader aspects of retirement planning. It comprises:

- a review and distillation of established research evidence on variables impacting on people's orientations to work in later life and retirement planning behaviour;
- interpretation of the above, with reference to the social science evidence base on motivating behavioural change;
- theoretically informed recommendations for public policy intervention strategy.

A significant proportion of individuals are disposed to extend their working lives, but many desire a change in working hours and place a high value on choice and flexibility over hours worked.

Higher rates of behaviour change are likely to result from a primary intervention emphasis on aspects that relate to the decision architecture. The role played by employers in configuring the options available to employees is key.

A bespoke approach to intervention is needed that takes account of different employment arrangements, practices and personnel profiles in different employment sectors.

A mental models approach is recommended to enhance the content of communication material and aspects relating to its transmission.

If you would like to know more about DWP research, please contact:
Carol Beattie, Central Analysis Division, Department for Work and Pensions,
Upper Ground Floor, Steel City House, West Street, Sheffield, S1 2GQ.
<http://research.dwp.gov.uk/asd/asd5/rrs-index.asp>